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ABSTRACT

Higher education everywhere is suffering from the need for expanded facilities at a time of financial stress. The Massachusetts State College System has instituted a Continuing Studies Program that offers an external degree following completion of the requirements. This document explores this program with reference to the economic needs of the Commonwealth in the 1970s and their impact on the system as a whole; backgrounds and current trends in the Massachusetts system; the current status of continuing studies in the system; and current developments in higher education and the effect on continuing education. It is felt that such a program through the use of electronic media, such as television, can further the goal of the State in educating its people without added financial problems. (HS)

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**NEW DIMENSIONS OF CONTINUING STUDIES PROGRAMS
IN THE
MASSACHUSETTS STATE COLLEGE SYSTEM**

The views and conclusions expressed in this report are solely those of the directors of the study and are suggested to the Provost and Board of Trustees of the Massachusetts State Colleges.

NEW DIMENSIONS OF CONTINUING STUDIES PROGRAMS IN THE MASSACHUSETTS STATE COLLEGE SYSTEM

A Study of Possible Future Developments

Fred F. Harclerod, *Director*
Robert J. Armstrong, *Associate Director*

THE AMERICAN COLLEGE TESTING PROGRAM

Iowa City, Iowa

April 1972

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PREFACE

The year 1965 stands out as a landmark date in the development of the Massachusetts State Colleges. The Willis/Harrington Act of 1965 established the 11-member, lay Board of Trustees for the Massachusetts State Colleges. On January 25, 1966, the Board of Trustees of the Massachusetts State College System began operation, and important far-reaching developments of the 11 colleges have taken place since that time.

This new form of governance came simultaneously with some of the most critical developments in the history of higher education in the United States. "Change" was, and still is, the order of the day in all types of postsecondary higher education and the Board of Trustees has been faced with massive problems since its beginning. Much has been accomplished. Curricula have been expanded to include a variety of majors beyond teacher education emphases which had previously existed. Capital outlay funds have been secured and a very significant building program is already in existence throughout the system. Large increases in enrollments have already taken place and more are anticipated. Flexibility in meeting the needs of students of all ages in the Commonwealth of Massachusetts is underway, and more flexibility is needed. Financial constraints have forced the Board to require students to pay the full costs of expansion at the graduate level and for some of the expansion at the undergraduate level. Much of this development has taken place in the Continuing Studies Program, and this section of the college operation has been a subject of numerous studies during recent years.

The current study of "New Dimensions in Continuing Studies Programs in the Massachusetts State College System and the Possible Future Developments and Additions" is a critical step in the analysis of this particular phase of the program. Although the initial agreement to undertake the study was made over 9 months ago, it took several months for the final arrangements to be established. The interim findings and a preliminary report were presented on December 28, 1971, and the reanalysis and final completion of the report took place in the succeeding 3 months.

The study and this report are designed to provide available data and recommendations for action, with the possible options, related to the following questions: Should such a degree program be at the bachelor's or master's level—or both? Should such a program be offered jointly, by several colleges working together, or by institutions operating singly? How should such a program be administered—by existing mechanisms, or by new ones?

Should the faculty for such programs be drawn from the ranks of existing faculties at the State Colleges (and other participating institutions)—or should a separate faculty be created? How should such a program be financed? What clientele, not now reached by the Massachusetts State College System, could be reached through an "external degree" program? What subject areas should be emphasized in such a new program: the liberal arts? professional courses? both? How much lead time would it take to plan such a program? What is the experience elsewhere? What testing procedures should be used? Should there be admissions requirements? What should be the role of correspondence instruction? Should the colleges set up neighborhood "program learning" centers to assist persons seeking an "external (or alternate) degree"? Should "face-to-face" seminars be a part of the program? Should the work done in an "external degree" program be automatically interchangeable with regular coursework? What types of student personal counseling services, especially career counseling services, should be made available?

In addition to the above questions, the study was conducted to explore the possibility for some or all of the institutions in the Massachusetts State College System to develop external or alternate degree programs, possibly in cooperation with other higher education institutions in the Commonwealth and with the public and/or commercial television stations.

The study has been conducted in the following fashion. An Advisory Committee was established composed of representatives from the System Office and from each of the colleges. A variety of members was appointed providing representation from the Council of Presidents, the Academic Deans, the Deans of Continuing Studies, and from Institutional and Educational Research. Two meetings of the Advisory Committee were held in order to provide guidance to the directors of the study, one in the early developmental stages and the second after various surveys and visitations had been conducted. Institutional representatives were appointed at each of the colleges in order to arrange for data collection and verification of factual materials. In addition, a number of the institutional representatives met with the Advisory Committee at its second meeting. Finally, the directors of the study met twice with members of the Board of Trustees who are most involved in continuing studies and educational policy developments in order to determine critical issues as seen from their perspective. These three groups provided important guidance and suggested critical nuances to be considered in the analysis of data.

Numerous past studies of the Massachusetts State Colleges were reviewed, and in particular those which examined the Continuing Studies Programs. A

number of such studies was available in 1970 and 1971 and a concurrent study has been underway simultaneously, conducted by a special committee composed of administrative and faculty personnel from the System. Liaison has been maintained with the work of this committee in order that the current study reported here and other simultaneous activities would be based on common data and common premises.

Some additional and broader activities have been conducted as a part of the study reported in this publication. First a comprehensive review of current innovative programs in higher education and in comparable institutions was carried out. The director of this study is also a member of the National Commission on the Future of State Colleges and Universities, and this relationship has been helpful in providing national perspectives and data. Three special surveys were conducted as a part of the total study. The first survey was a study of attitudes of faculty and administration of the Massachusetts State College System on a series of questions relating to continuing education and external degrees. The second survey was an attempt to secure the latest information regarding the facilities for radio and television program preparation and transmission, as well as the availability of public service television in the region. A third survey was made on the actual internal operations of the Continuing Studies Programs by visiting nine of the campuses (all colleges except the Massachusetts Maritime Academy and the College of Art were actually visited).

Finally, a search of available literature and visits to appropriate government agencies provided information reviewing the economic planning and manpower needs for the Commonwealth of Massachusetts in the 1970s. With these data and extensive information regarding the curricular expansion of each of the colleges and their enrollments in each field, it was possible to demonstrate the expanding impact of the Massachusetts State College System on the current and planned developmental needs of the Commonwealth of Massachusetts.

This current report is a part of a continuum of studies relating to curricular development in the Massachusetts State College System and the Commonwealth of Massachusetts. The recommendations and possible options must be limited by the constraints which exist in the form of legislation and financing of the Massachusetts State College System as well as its relationships to the needs of the society and the other institutions of higher education in the state. It is clear that the Massachusetts State College System will have an

increasingly important role to play in the economic, social, and technological development of the Commonwealth. If the recommendations which grow out of this study are implemented by the General Court and the Board of Trustees, administration, and faculty, the Massachusetts State College System will play an even more critical and vital role in the years to come.

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Chapter 1

ECONOMIC NEEDS OF THE COMMONWEALTH OF MASSACHUSETTS IN THE 1970s AND THEIR IMPACT ON THE MASSACHUSETTS STATE COLLEGE SYSTEM

The Commonwealth of Massachusetts is the population and economic center of New England. The citizens of Massachusetts have always had a high per capita income in comparison with other states of the United States, and the state has had extensive industrial and urban development. In 1967, only 11.2% of Massachusetts households had a family income of less than \$3,000, which was considered to measure the poverty line. Only California and Connecticut had a smaller percentage of poor. In contrast 20.2% of all the families in the nation had an income less than \$3,000 per year. On the upper end of the scale, 26.0% of its families had an income greater than \$10,000, compared to a national average of 24.5%.¹

In 1968 the total personal income for Massachusetts was determined to be \$20,974,000,000—9th among the 50 states.² In 1970 it had risen to \$24,852,000,000, and it is estimated that the comparative estimates for the 1971 year will be \$26,763,000,000 (a 7.7% increase in 1 year) which is 10th in the United States.³ Only 9 states produce a higher total personal income than Massachusetts, in the following order: California, New York, Illinois, Pennsylvania, Ohio, Texas, Michigan, New Jersey, and Florida.

¹The Commonwealth of Massachusetts, *Third Report of the Special Commission to Develop a Master Tax Plan Relative to the Massachusetts Economy and Its Growth Potential*, Senate No. 1315, February 1971, p. 17.

²Robert B. Bretzfelder and Q. Francis Dallavalle, "Total and Per Capita Personal Income by Regions and States, 1968," *Survey of Current Business* 49, August 1969, p. 14. (Data secured from "Rankings of the States, 1970," p. 14, Research Report 1970-R1, Research Division of the National Education Association, Washington, D.C.)

³*Business Week* (January 8, 1972), p. 76.

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Economic Development in the 1970s

Massachusetts' production of economic wealth, when compared with the difficult circumstances in which it takes place, is an amazing human accomplishment. A report of the Massachusetts Advisory Council on Education emphasizes this as follows:

Even though the region suffers from a great variety of locational handicaps—high transport costs, tax rates and cost of living, distant markets, poor soils and bad weather—it has successfully competed in national markets. Although its major advantage was a headstart which was only an historical accident, it now possesses many man-made advantages—external economies and increasing specialization in high skill, technically oriented, labor-intensive industries.⁴

Historically, the entire geographic area provided textiles, shoes, hand tools, and weapons in addition to profiting from the "triangle of trade." In recent years the textile and shoe industries have become severely depressed. For example, in 1971 the closing of an additional 20 shoe factories cost 5,540 jobs. (Paraphrased from Maxwell Field, Executive Vice President of the New England Footwear Association, *Business Week*, January 8, 1972, page 76.) But a change to diversified manufacturing, with a great deal of emphasis on electrical machinery, has filled much of the gap.

A recent economic analysis of New England has emphasized the fundamental changes which are taking place in the economy of New England and of Massachusetts.⁵ In conducting this current study the investigators met with representatives of the State Planning Commission, the Department of Employment Security, the Executive Office of Manpower Affairs, and the Office of Science and Technology. Representatives of all of these offices agreed that the best total economic study available in December 1971 was the Arthur D. Little report. In studying major industry groups, the Arthur Little analysts found that the entire future development of key industries, and thus the increasing personal income base, depends upon the continuing support and development of the professional and skilled labor force. For example, in nonelectrical machinery they note that, in spite of being sensitive to cyclical

⁴Carl J. Schaefer and Jacob J. Kaufman, *Occupational Education for Massachusetts*, a report prepared for the Massachusetts Advisory Council on Education, June 1968, p. 205.

⁵Arthur D. Little, Inc., *New England: An Economic Analysis*, a report prepared for the New England Regional Commission, Cambridge, Massachusetts, November 1968.

business fluctuations because of dependence upon capital equipment expenditures "...with generally highly skilled workers and professionals and a responsiveness to technological improvements in production, the industry has performed well relative to the nation, and its prospects are very encouraging."⁶

The same facts are true of the electrical machinery, communications and electronics equipment industries concentrated in the greater Boston area. In fabricated metal products, a highly skilled labor force is critical. The future of the paper and allied products industry depends on the use of new technologies, which emphasize skilled manpower. In printing and publishing, the report emphasized that

because of New England's high concentration of educational institutions and service industries (e.g., finance and insurance) the future of printing and publishing in New England is bright. An industry that is highly concentrated and increasingly capital-intensive, it is centered in Boston, a major national publishing area. New technological advances, such as in photo-composition, are almost certain to influence growth and relative composition of labor and capital. New media are also influential—television, educational films, for example—but publishing will probably remain less vulnerable. Among all nondurable industries, this group seems likely to require an increase in employment despite its capital intensity.

The same generalizations are also true of possible future development of rubber and plastics; here, the Little report once again emphasized the area's "...strongest factor, a highly-trained labor force of skilled craftsmen exposed to threshold technological developments arising from New England's high professional and managerial competency. This same thread runs throughout our entire analysis of the New England economy."⁸

In addition to the emphasis on high technology industries, there is a major additional trend in Massachusetts toward all types of "services."

Most service industries were shown to have a very high proportion of professional workers: 65.7 percent in education, 46.1 percent in medical services and 42.2 percent in welfare; and most other growth industries have a considerable proportion: 18 percent in

⁶Ibid., p. 11.

⁷Ibid., p. 13.

⁸Ibid., p. 14.

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electrical machinery, 13.6 percent in chemicals. However, between 1950 and 1960, professional workers increased by over 69,000, so continuing increase in the demand for professional workers can be foreseen. A similar increase is likely for service workers.⁹

In the past 20 years, the greatest increases in employment throughout Massachusetts have been in professional occupations.¹⁰ This rate of increase has been considerably greater than in the United States as a whole and has made it possible for Massachusetts to maintain its favorable economic, cultural, and social conditions.

The future of New England's economy appears to rest with the new technologically-oriented manufacturing and service industries rather than with old-line industries such as textiles, shoes and leather, and apparel. To repeat, it is therefore dependent on a highly skilled labor force. Of the projected increase in employment in Massachusetts between 1960 and 1980, 23 percent is estimated to be in professional occupations, all of which require a high degree of education. This implies extra pressure upon the existing educational system, and the question is asked whether this demand for education can be met"

[The 1968 report of the Massachusetts Advisory Council on Education once again provides important guidelines.] Although Massachusetts has, throughout its historical development, been well-endowed with excellent educational institutions, both public and private, it is vital for the strength of the region's economy that these establishments not only maintain their quality but also extend their facilities. Similarly at lower educational levels, Massachusetts needs to maintain and improve its position with regard to secondary schools and technical training.

If the expansion of the educational system, which is necessary to provide sufficient highly skilled labor, does not occur, it is likely that Massachusetts, and New England in general, will find it difficult to compete with other regions of the United States which are more richly endowed with natural resources and locational advantages.¹¹

Finally, in reviewing regional obstacles and opportunities, the Little report stressed

... the promise of high growth. New modes and techniques of transportation have "reduced" distance, shortened delivery time, lowered raw materials and energy costs, lessened competitive disadvantages. These include air cargo, interstate highways, containerization, high-speed rail and truck service, huge ocean-going tankers. Low-cost

⁹Schaefer and Kaufman, op. cit., p. 225.

¹⁰Ibid., pp. 216-217.

¹¹Ibid., p. 227.

nuclear power generation is fast reducing the age-old dependence on high-cost fossil fuels for energy. Important future segments of the aircraft and shipbuilding industry are firmly established in the region. Entirely new products and new industries continue to appear and expand, *fed by an unexcelled technological input from the region's educational, scientific, research and development, and medical community.* The region's entrepreneurial, management and professional skills are unmatched in the world economy, and its highly trained labor force retains the craftsmanship of traditional industries. The provision of valuable services, many of them exportable, has become much more important to the regional economy than the production of goods.

As a result, New England's unique opportunity presents itself in the form of its human resources. The potential for high productivity gains lies in the application of these resources to low-weight (or weightless) raw materials to produce finished commodities (or services), readily transportable to tomorrow's high-technology markets. These are the growth markets, and they are the markets New England has developed the capabilities to serve. Thus, New England's output will become increasingly high-valued per unit, capital-intensive, service-oriented, economically exportable, and—most important—sought after in the marketplace.¹²

Population Growth and Potential College Student Enrollment

The Arthur Little study also reports that the population in Massachusetts will increase 22.3% by 1980, employment 23.1%, and wages and salaries 76.7%.¹³ This growth from 1965 to 1980 would appear to be reasonable, as projected in estimates of the recent 1970 census. In 1960 Massachusetts had a population of 5,148,578. In 1970 the population stood at 5,630,224, a gain of 9.4% in the decade. This compares with an overall growth in the United States of 11.7% during the decade, and makes Massachusetts the 10th largest state in the union in population.

Total college-age population, as shown in Table 1.1, was estimated at 357,000 out of the overall population. Degree-credit enrollment was estimated at 294,477. This is a relatively heavy load because Massachusetts has a very high concentration of population. In 1969 it had the third highest population per square mile in the United States (695) exceeded only by Rhode Island and New Jersey. As of the end of December 1968 it had the fifth highest percentage of population which was considered urban (81.9) exceeded only by Rhode Island, New Jersey, California, and New York.¹⁴ Figure 1 shows

¹²Ibid., pp. 16-17.

¹³Ibid., p. 344.

¹⁴National Education Association, op. cit., p. 10.

TABLE 1.1
MASSACHUSETTS COLLEGE-AGE POPULATION,
DEGREE-CREDIT ENROLLMENT, AND DEGREE-CREDIT
ENROLLMENT RATE FOR THE PERIOD 1960-1987

Year	College-Age Population ^a	Degree-Credit Enrollment ^b	Degree-Credit Enrollment Rate ^c
1960	253,200	134,108	52.96
1961	274,900	138,167	50.26
1962	285,400	155,647	54.53
1963	292,200	171,331	58.63
1964	294,100	189,044	64.27
1965	313,900	211,251	67.29
1966	328,000	232,821	70.98
1967	345,000	252,638	73.22
1968	361,900	269,785	74.54
1969	355,000	282,442	79.56
1970	357,100	294,477	82.46
1971	363,100	312,691	86.11
1972	373,300	333,240	89.26
1973	384,700	352,870	91.72
1974	394,300	376,539	95.49
1975	403,500	396,317	98.21
1976	410,700	414,692	100.97
1977	417,000	430,572	103.25
1978	423,100	444,766	105.12
1979	429,700	458,807	106.77
1980	432,800	469,325	108.43
1981	433,400	479,028	110.52
1982	432,200	485,119	112.24
1983	421,900	481,447	114.11
1984	407,500	476,537	116.95
1985	397,700	469,121	117.95
1986	N/A	460,903	--
1987	N/A	465,496	--

^aPopulation estimates and projections taken from: Everett S. Lee and Jong Mo Rhee, *Population Estimates and Projections: New England States 1960-1985*, Population Research Institute, University of Massachusetts, January 31, 1969.

^bDegree-credit enrollment projections taken from: Ronald B. Thompson, *Projections of Enrollments Public and Private Colleges and Universities 1970-1987*, The Ohio State University, December 1970 (based on trends 1960-1969).

^cThe total number of students of any age taking courses toward an academic degree per 100 of college-age youth (youths 18, 19, 20, 21).

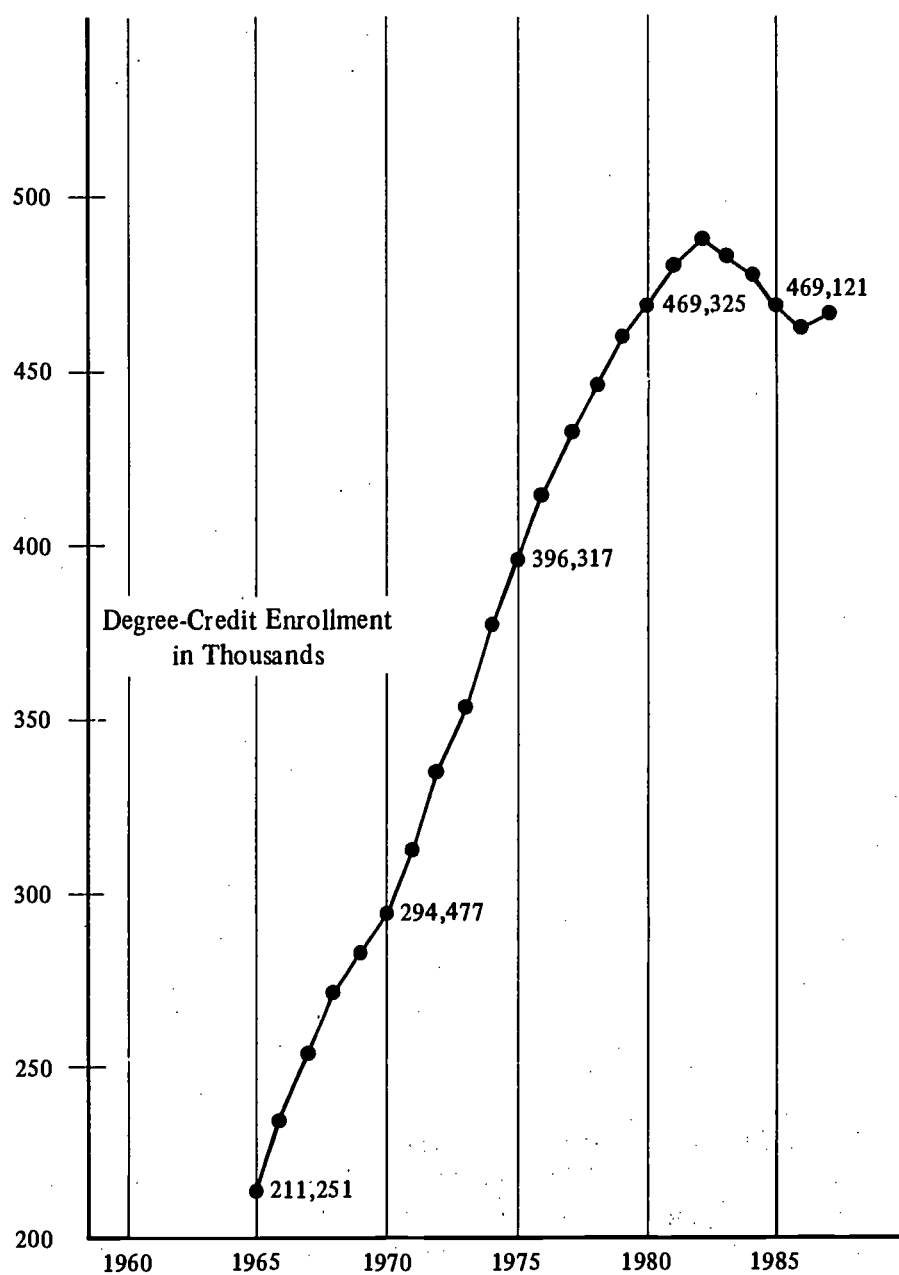


Fig. 1. Projected Massachusetts total degree-credit enrollment. Taken from: Ronald B. Thompson, *Projections of Enrollments Public and Private Colleges and Universities*.

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dramatically the growth potential in probable degree-credit enrollment in both public and private colleges and universities in Massachusetts during the years following 1970, and until 1983 when it begins to drop off. Obviously, current plans must be made to accommodate the student bodies which will continue to move onto campuses between 1972 and 1979. Although an increase will follow after 1979, it will be a momentary spurt and enrollment in 1986 should approximate enrollments in 1979. These projections, made on a national basis and applied to Massachusetts, are somewhat higher than those developed by the Board of Higher Education and reported in its January 1969 enrollment study for Massachusetts as 351,081 in 1975 and 410,795 in 1980.¹⁵ Even though the Board of Higher Education projections are less than those prepared by R. B. Thompson, and used in the preparation of Table 1.1 and its accompanying graph (Figure 1), they are still extremely high. In this connection it may be well to note that Thompson was the original predictor of the wave of students which inundated higher education in the late 1950s and 1960s, and he has been very close in his estimates over the last quarter of a century. While there may be some differences in actual numbers, the growth potential for public and private higher education in Massachusetts is very high and the need for planning to meet these demands is critical. Although at the present time there may appear to be less pressure for college degrees, the need for college-educated professionals by the Massachusetts economy will undoubtedly encourage these massive additions to college student populations.

The anticipated growth of the Massachusetts State Colleges, an important part of the public 4-year component in the Board of Higher Education study, will be an appreciable part of the total growth which will take place in Massachusetts. Undergraduate enrollment is estimated to rise from 27,826 in 1969-70 to 42,463 in 1975-76 and to 59,691 in 1980-81. Also, an appreciable graduate enrollment increase is estimated—from 8,241 in 1969-70 to 11,727 in 1975-76, and to 15,456 in 1980-81. Thus, total enrollment expectations anticipate an increase from 36,067 in 1969-70 to 54,190 in 1975-76, and to 75,147 in 1980-81.¹⁶ These increases, large as they seem, are actually lower than the projections using a normally accepted population ratio method of projection. When the Board of Higher Education study team used this system of projection, the resulting estimates were almost 25% higher

¹⁵ Board of Higher Education, *Higher Education Enrollment Study for Massachusetts*, January 1969, p. 23.

¹⁶ *Ibid.*, p. 44.

than the enrollment expectations of the institutions.¹⁷ Thus, using the population ratio projections, the Massachusetts State College System should expect and plan for approximately 90,000 students in 1980-81.

Support for Higher Education

During recent years the Massachusetts legislature has increased its level of support for public higher education in Massachusetts, including the Massachusetts State Colleges. These facts are well illustrated by the following list from *The Chronicle of Higher Education*, January 3, 1972, page 4. Some of these data are inexact since they reflect only original budgets and leave out supplementary budgets and adjustments. Nevertheless, they provide good indications of overall percentage growth rates.

MASSACHUSETTS

Institution	1971-72 Appropriation	2-Year Change
U. of Massachusetts		
State Colleges:	\$ 58,614,000	+47%
Boston	5,827,000	+43%
Bridgewater	4,486,000	+57%
Salem	4,423,000	+41%
Worcester	3,148,000	+65%
Fitchburg	3,061,000	+51%
Westfield	2,700,000	+43%
Framingham	2,660,000	+49%
Lowell	2,476,000	+36%
North Adams	1,593,000	+83%
College of Art	1,260,000	+97%
Maritime Academy	853,000	+65%
Board of Trustees	324,000	- 6%
Lowell Tech. Inst.	6,935,000	+41%
SE Mass. U.	4,883,000	+41%
Community Colleges	19,730,000	+79%
Board of Higher Education	7,235,000	+70%
TOTAL	\$130,212,000	+53%

¹⁷Ibid., pp. 12-13.

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Undoubtedly these improvements have been an important factor in the continuing development of the Massachusetts economy during the past decade. Nevertheless, Massachusetts is not strongly supportive of public higher education, on a per capita basis. Various studies indicate that it stands 49th out of the 50 states in support of public higher education. For example, a recent study by M. M. Chambers indicates that the appropriation per capita is \$22.72, followed only by New Hampshire. The national average appropriation per capita is \$37.85 and other states in the top 10 in population and in total personal income run considerably higher (*The Chronicle of Higher Education*, January 3, 1972, page 1). Another study indicates that per capita state and local government expenditures for higher education in 1969-70 place Massachusetts 49th, with an expenditure of \$37.56, compared with the national average of \$63.60 (*Rankings of the States*, "Governmental Finances in 1969-70," U.S. Department of Commerce, Bureau of the Census).

These expenditures for higher education are extremely different from some other types of expenditures. For example, Massachusetts rates high among the 50 states in per capita expenditure of state and local governments for health and hospitals (in 1967-68, 5th), for police protection (in 1967-68, 10th), and for fire protection (in 1967-68, 1st).¹⁸

Future Ability to Support Higher Education

Obviously, Massachusetts has the money in the form of disposable income to support those public services which it feels are essential. The extensive study by the special commission chaired by George V. Kenneally, Jr., reported as follows in February 1971.

Over the five years (1968-1973) total revenues should grow somewhere between \$0.832 billion (36.1%) and \$1.303 billion (56.5%). Moreover, major changes in defense spending in the Commonwealth should not substantially affect these revenue projections. Given continued growth in personal income, revenues should continue to grow, and to summarize, the Massachusetts tax structure seems quite responsive to the growth of personal income.¹⁹

In addition, the Commission projected potential tax revenues through 1980, based on three possible cases. In case one the total revenue projected is 6.3 billion, in case two it is 4.6 billion and in case three 5.0 billion. They also

¹⁸National Education Association, op. cit., p. 51.

¹⁹The Third Report of the Special Commission, February 1971, op. cit., p. 71.

projected separate components of the tax system and found that the sum of the projected components would be 8.6 billion in the first case, 7.8 in the second case, and 6.9 billion in the third case. The Commission went on to state that

although it is possible that the yield of the present revenue structure could reach the levels represented by the sums of the projections, this is unlikely because the forces assumed in the projections do not in fact operate in isolation and therefore should not be expected to continue unmodified over the period of the projections. Therefore these sums of projections must be regarded as less reliable than the projected yield of the revenue structure operating as a whole.²⁰

Under any of these systems, it is apparent that additional funds can be made available for higher education if the citizens of the Commonwealth of Massachusetts, acting through the legislature, determine that their priority should be high enough to make a major demand on the additional tax resources which will be available in the years to come.

Future Manpower Needs in Massachusetts

The Division of Employment Security of the Commonwealth of Massachusetts completed in October 1971 an analysis of the anticipated requirements for manpower in the Commonwealth to 1975.²¹

The methodology followed by the Division of Employment Security was developed cooperatively with the Bureau of Labor Statistics of the United States Department of Labor. An economic model was prepared which included the development of an occupational matrix of 116 industries and 150 occupations. Extensive historical series were established and estimates of industry and employment were made based on a set of six assumptions as follows:

1. A national unemployment rate of 3 percent is attained in 1975.
2. No major event such as a prolonged depression of the type of the early 1930's will occur to alter substantially the rate and nature of economic growth.

²⁰Ibid.

²¹Division of Employment Security, Occupational Research Department, Commonwealth of Massachusetts, *Massachusetts Manpower Requirements to 1975*, Boston, Massachusetts, October 1971, pp. 1-6.

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3. Scientific and technological advances of recent years will continue at about the same rate of change.
4. Economic and social patterns and relationships will continue to change at about the same rate as in the recent past.
5. Based on the assumption that the Vietnam conflict will have been over for some time by 1975, defense expenditures will hold at about the 1955-65 rate.
6. In practically all industries national export-import trends between 1947 and 1968 will continue to 1975.²²

From this complicated system it was possible to develop a total estimate of labor demand in all types of professional, technical, craft, and unskilled workers. Employment in 1968 in each of these many areas was determined as a base and employment needs in 1975 were determined as a target, based on growth and deaths and retirements. From these figures the total net demand in all types of specific occupations was developed and detailed.²³

A few of the highlights of the study are as follows: (1) there is a shift toward the service sectors—personal, business, medical and educational, private as well as governmental—and away from employment in the production of goods; (2) an additional 208,500 workers will be required between 1968 and 1975 to fill new jobs and 519,200 will be needed to replace workers leaving the labor force for all varied reasons; (3) the occupational composition of the work force will continue to shift away from low-skilled fields of work toward occupations emphasizing services and professional, technical, and clerical skills; (4) “a high proportion of new jobs will be centered in industries which even now have special problems in manpower planning and training”; (5) total employment will increase at an annual rate of 1.1% from 2,357,100 in 1968 to 2,541,400 in 1975. Of the increases 146,000 will be in the service sector, including personal, business, medical, and educational services. The major industry groups which will provide new jobs in the 1968-75 period are shown in the following list of growth industries.

With the completion of this study, Massachusetts is one of the few states which has made such a complete forecast of future occupational needs. In his preface to the study Herman V. LaMark, Director of the Division of

²²Ibid., pp. 14-15.

²³Ibid., pp. 45-48.

MASSACHUSETTS GROWTH INDUSTRIES 1968-1975

Growth Industries Selected Categories	Change 1968-1975	
	Amount	Percent
All Industries	184,300	7.8
Construction	20,600	16.2
Transportation, communication, public utilities	10,400	8.0
Motor freight transportation	5,300	17.3
Air transportation	1,800	25.4
Communications	11,000	41.4
Electric, gas, sanitary services	- 2,800	- 8.6
Trade	41,600	8.3
Wholesale	15,500	13.1
Retail	26,100	6.8
Finance, insurance, real estate	10,100	8.2
Services	146,100	23.7
Medical and health	35,300	21.3
Education	57,500	31.2
Public Administration	21,800	20.1

Employment Security, points out that "... there are few jobs whose content and outlook are not constantly changing. New technologies and new life styles are making old trades obsolete and creating new patterns of work. The choice of skills for which training should be given has become one of the most difficult tasks of government." Fortunately, the results of this manpower study make it possible to determine the curricular fields in which the Massachusetts State College System is now providing opportunities for citizens to prepare for current occupational needs and for the system to plan necessary curricular adaptations in the near future.

Contribution of the Massachusetts State College System to Massachusetts Manpower Needs

The diversification of the programs in the Massachusetts State Colleges within the past 5 years and its affect on future manpower needs in Massachusetts is shown dramatically in Table 1.2. Of course, the historical major purpose—the education of teachers—shows its influence. The demand for teachers of all types is forecast as 37,279 between 1968 and 1975. At the present time it appears that the Massachusetts State College System will provide 42% of the supply of first-time appointees in such positions. The large number of

TABLE 1.2
COMPARISON OF MASSACHUSETTS MANPOWER REQUIREMENTS
and
ONE SOURCE OF TRAINED MANPOWER AS REPRESENTED BY THE
MASSACHUSETTS STATE COLLEGE SYSTEM'S CURRENT ENROLLMENT

Net Demand— Manpower Requirements 1968-1975 ^a	Demand	Supply ^b	Supply Minus Demand	% Supply Is of Demand
ALL TEACHERS	37,279	15,645*	-21,634	42%
Elementary Teachers	14,434	6,282	- 8,152	44%
Other Teachers (Secondary, College, Other)	22,845	9,363	-13,482	41%
NATURAL SCIENTISTS	3,494	1,345*	- 2,150	38%
Chemists	1,918	94	- 1,824	5%
Biological Scientists	311	437	+ 126	141%
Geologists	105	1	- 104	1%
Mathematicians	412	653	+ 241	158%
Physicists	654	22	- 632	3%
Other Natural Scientists	35	138	+ 103	394%
ENGINEERS, TECHNICAL	21,951	946*	-21,005	4%
MEDICAL & OTHER HEALTH WORKERS	37,068	1,663*	-35,405	4%
Dietitians, Nutritionists	796	22	- 774	3%
Nurses, Professional	18,528	342	-18,186	2%
Psychologists	732	1,147	+ 415	157%
Technicians, Medical, Dental	7,129	152	- 6,977	2%
SOCIAL SCIENTISTS AND OTHER PROFESSIONAL, TECHNICAL	63,421	1,716*	-61,705	3%
Economists	420	112	- 308	27%
Other Social Scientists	114	84	- 30	74%
Workers in Arts, Entertainment	9,389	684	- 8,705	7%
Designers, except Design Draftsmen	1,190	186	- 1,004	16%
Librarians	2,814	54	- 2,760	2%
Photographers	528	NA	—	—
Social and Welfare Workers	3,659	596	- 3,063	16%
MANAGERS, OFFICIALS, PROPRIETORS	45,387	871*	-44,516	2%
OTHER				
Nurses, Practical	14,029	188*	-13,841	1%
Law Enforcement	4,232	218*	- 4,014	5%
		7,975*		
		9,913*		

^aMassachusetts Department of Employment Security, *Massachusetts Manpower Requirements to 1975*, Boston, Massachusetts, October 1971, Table VI, pp. 45-48. (In cooperation with the Bureau of Labor Statistics, United States Department of Labor)

^bThe sum of the figures having asterisks (40,480) is approximately equal to the total enrollment in the Massachusetts State College System. Total numbers of students listed by major fields are somewhat less than gross enrollment (headcount) for each college and the total system. This may be due to the presence of students in the system who have not declared a major field.

Net Supply—as Represented by Currently Enrolled Students in the
Massachusetts State College System^c

All undergraduates currently enrolled in a program of teaching orientation
 All undergraduates currently enrolled in elementary education
 All undergraduates currently enrolled in a program of teaching orientation minus those
 in elementary education
 All graduate and undergraduate students in nonteaching orientation programs listed:
 Chemistry
 Biology
 Chemistry-Geology
 Mathematics
 Physics
 Earth Science, Natural Science, General Science
 Engineering and Technology (Elect., Ind., Mgnt., Marine, Comp. Sci.)
 Food and Nutrition Masters Programs
 Four-Year Nursing Programs
 Psychology and School Psychology Masters Program
 Medical Technology
 Economics
 Social Science
 Art and Fine Arts
 Design
 Library Science and Librarianship Masters Programs
 Photography major are included in the Fine Arts Program listed above.
 Sociology
 Business Administration
 One-Year Nursing Programs
 Law Enforcement

Total other undergraduates enrolled in nonteaching programs, not elsewhere classified.
 Total graduate students, not elsewhere classified.

^cExact enrollment breakdowns by institution, by academic program are given in
 Appendix II.

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graduate students not elsewhere classified (9,913) appears to be primarily in-service teachers working on graduate programs, many of them on a part-time basis. In addition, many of the undergraduates enrolled in nonteaching programs and not classified in the special fields of the table (mostly in the humanities and social science fields) may end up as teaching candidates and increase the proportion of the total demand for teachers which will be supplied by the Massachusetts State College System.

However, the number of students in nonteaching majors has rapidly increased, particularly as the variety of degree programs has expanded. A comparison has been made of the occupational needs in a number of appropriate fields with the number of students enrolled in these major fields at each of the various Massachusetts State Colleges, and the totals are shown in Table 1.2. Six breakdowns are shown, for demand and supply in natural science; engineering-technical; medical and other health workers; social science and other professional, technical; managers, officials, proprietors; and other. "Demand" figures for each of the items on the table are derived from Table VI of the manpower study of the Division of Employment Security.²⁴ "Supply" is derived from the reports of each of the state colleges for the number of persons majoring in each field in the fall semester in 1971-72. Summary figures are provided in the table, and the breakdown by colleges is provided in Appendix II. Of course, some of the students now enrolled in each of the various fields will drop out of college or will change majors before completing a degree. On the other hand, by 1975 the enrollments of the colleges will be much larger and, if the trend lines are steady, a continually larger proportion of students will be registered in nonteaching majors. Most of the freshman students enrolled in 1971-72 will graduate by 1975; thus, the current total enrollment in the various fields appears to be a crude but logical estimate of the supply of specialized professional personnel which the Massachusetts State College System will graduate in the period ending in 1975. At the least, it is a beginning base for estimation of the contribution of the Massachusetts State Colleges to the manpower needs of the Commonwealth.

In the area classified as "natural scientists" the Massachusetts State Colleges, as a whole, will provide some net supply in all fields except agricultural scientists. Against a demand of 3,494 from the remaining natural science fields 1,345 persons are currently majoring in these fields. In chemistry there are 94, in biological science 437; there are 653 mathematicians, 22 physicists,

²⁴Ibid.

1 geologist, and 138 other natural scientists. Comparing the supply with the demand, the state colleges will provide 38% of the "natural scientists" needed in the state during this period. In fact, they will produce an oversupply, for the entire state, of biological scientists and mathematicians. Undoubtedly many of the nonteaching biological scientists and mathematicians will end up moving into the teaching profession. On the other hand, it is important that the state colleges are beginning to contribute chemists and physicists for the specialized economy even though the percentages are only 5% and 3%, respectively.

The total demand for new engineers in the manpower study is shown as 21,951. Nine types of "engineers, technical" are differentiated in the manpower study ranging from aeronautical to mining, with a fairly large catchall area. The four large areas of demand are civil, electrical, industrial, and mechanical. The Massachusetts State Colleges currently have an enrollment of 946 students in major fields within these classifications. Three hundred and thirty-three are at Massachusetts Maritime Academy in marine engineering or transportation. The remaining 613 are at Fitchburg with 463 in the Bachelor of Science Degree program in industrial sciences supported by the Raytheon Corporation, and 150 in the evening college state-funded program. Areas of concentration of these students are in electrical technology, computer science, industrial management or technology, and manufacturing or mechanical technology. These programs are critical manpower resources for the future technological development in the state of Massachusetts and constitute 4% of the total supply. Fitchburg also provides the bachelor's and master's degrees in industrial education. Throughout the United States many persons with this type of background go into industrial technology and other types of work related to engineering. Students in these fields are not counted as part of the total supply in the engineering, technical area but, in fact, a number of them will undoubtedly end up working in this area.

One of the most rapidly developing fields of service in the United States is that denoted as "medical and other health workers." It is significant that 4% of the need for dietitians and nutritionists, 3% of the need for professional nurses, and 2% of the need for medical technologists can be filled by students currently enrolled in the state colleges. "Psychologist" is difficult to determine and to define. In the field itself there is a preference for persons with a doctorate to be allowed to use the term "psychologist." With the extensive graduate programs for school psychology and the bachelor's degree programs in psychology, there is an extensive source of supply for psychologists with this type of background. Accurate predictions of supply

and demand in the psychology field will require more complete criteria and determination of need for doctoral study for the 732 psychologists currently listed as the "demand" for this type of specialists.

The areas of "social scientists" and "other professional, technical" in the manpower study have been combined as one section in this table. Once again in discussing "economists and other social scientists" the criteria do not specify whether or not the demand requires persons with doctoral training. If not, it appears that the state colleges can supply 27% of the economists and three-fourths of the other social scientists. Social and welfare workers are considered separately, of course, and 16% of the total need can be met from the state colleges if only sociology majors are considered. Of course, in hiring social welfare workers, persons from other fields are often employed, particularly people from the field of psychology. In the manpower study, separate figures are given for statisticians and actuaries and for accountants and auditors. Some students from business administration or mathematicians may very well qualify for positions in these two fields. However, it was impossible to obtain a breakdown of students in subfields of business or mathematics and thus no estimate is possible of the supply of persons in these critical fields which will come from the state colleges. This is unfortunate since there is a net demand for 7,802 accountants and auditors and 466 statisticians and actuaries.

The Massachusetts State Colleges will provide 7% of the needed workers in the arts and entertainment field and 16% of those needed in the design field. The need for librarians is quite large and the state colleges, significantly enough, will be able to supply only 2% of this overall need. Finally, in this area, photographers are specified as a significant area of demand, with 2,335 to be employed in 1975 and a need for 528 additional new ones in this figure. Photography is offered at the Massachusetts College of Art and many of the fine arts and design students take work in the field. At the present time it is impossible to "break-out" a specific figure in this field. Nevertheless, it is evident that a significant percentage of the supply of photographers will come from this one college.

In the business and administration field and the preparation of managers, there is a very small development in the Massachusetts State College System. Only two colleges offer majors in business administration and will provide only 2% of the needs of the state in this critical area. Most comparable state colleges have programs varying from 10-20% of their entire student body in this field. This is an area of serious shortage and undoubtedly will expand in the future.

In the two "Other" programs, the practical nurse is not a baccalaureate degree program but one state college was offering it as a special service to its area in 1971-72. This is an area of great need which is normally provided by vocational schools or community colleges. On the other hand, the area of law enforcement is growing in the state colleges and major fields of study are provided at two colleges at the present time, potentially supplying 5% of the demand.

It can be seen clearly from this analysis that the Massachusetts State College System has broadened its areas of service to the social and economic needs of the Commonwealth of Massachusetts in the 5 years since the new Board of Trustees was established. This development parallels comparable developments all over the United States. In 1969, under the direction of the Director of this current study, there was an investigation of all institutions of this type throughout the United States.²⁵ A two-dimensional framework (Figure 2) was developed as a part of this study with which to analyze institutions of higher education. In examining this chart, it is clear that the Massachusetts State Colleges have moved from the category of "specialized applied institutions" and are in the comprehensive institutions area (close to number 5) with the exception of the Massachusetts Maritime Academy (see number 1) and the Massachusetts College of Art which is a specialized applied institution offering the master's degree.

In this 1969 study, colleges and universities from all over the United States provided data on those programs which had been developed between 1965 and 1967 and those which were proposed for development in the 1967-70 period. A redo of this national study was underway at the same time the Massachusetts State Colleges' continuing education programs were being studied. Table 1.3 provides data from these two studies and gives a good picture of the rapid expansion of degree programs by the Massachusetts State College System. It is clear that only a few of the programs planned in 1967 have not been developed—such as urban studies and business at Boston State, trade and industrial training at Massachusetts Maritime Academy, and health science at Worcester. Most of the 1967 proposed programs had been developed by 1971. Within the institutions there is a readiness to meet the needs of the state of Massachusetts for the specialized manpower which will be critical for the future social and economic development of the Commonwealth.

²⁵A *Study of the Historical Background, Current Status, and Future Plans of the Developing State Colleges and Universities*, Fred F. Harclerod, H. Bradley Sagen, and C. Theodore Molen, Jr., U.S. Department of Health, Education, and Welfare, August 1969, p. 105.

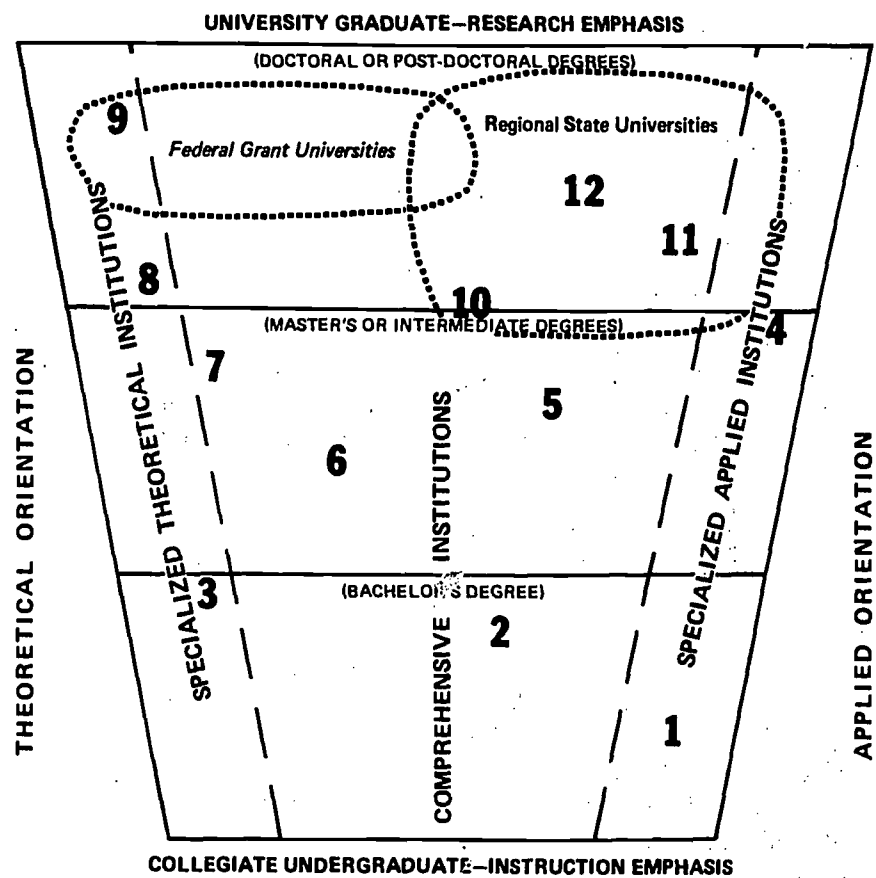


Fig. 2. Examples of institutions on a two-dimensional framework for classifying higher educational institutions.

TABLE 1.3 /Continued/

Institution	Newly Developed ^a 9165-67	Proposed 1967-1970 ^b	Offered June 1971	Degrees under Consideration 11/1971 ^d
College of Art	N/A	N/A	N/A	Restructure of Current Degrees
Maritime Acad.	N/A	BS BS	YES YES	NONE
North Adams	BA Math.	Engineering Trade and Industrial Training	YES	Changed to Marine Transportation
		Biological Science Education	YES	NONE
		Literature & Foreign L.	YES	
		Business	YES	
		English	YES	
		Math.	YES	
		Psychology	YES	
Salem	BS Ed. BA MAT MAT	Nursing History English Math.	YES YES YES YES	BA Art BA Sociology
Westfield	N/A	Fine Arts Social Science	YES YES	NONE
Worcester	NONE	Library Science Health Science Psychology	YES NO YES	BS Nursing BA Management Science BA Communication Disorders

^aTaken from the 1966 AASCU Study Questionnaire by Fred F. Harclerod.^bTaken from the 1970 AASCU Study Questionnaire by Fred F. Harclerod.^cTaken from the Listing of Massachusetts State College Degree Offerings June 1971 and December 1970 as provided by Robert J. Armstrong.^dTaken from the Massachusetts State College List of "New Degrees Under Consideration by the Academic Affairs Committee, November 1, 1971."

Summary

Clearly, Massachusetts has always been a leader—in fact, a bellwether—among the critical states of the United States, those which are largest in population, largest in industrial, commercial and personal income, and which take the lead in developing new or changed social institutions. In its economic development in the 1970s, the Commonwealth will be dependent on “threshold technological developments,” the developing “knowledge” industry, and a major shift in the other specialized service industries. In order that this development can take place, a highly trained labor force with increasing educational background will be necessary. In addition, “retooling” of even the most highly trained and competent persons will be critical. These educational needs will place increasingly serious demands upon the educational facilities in Massachusetts and particularly on those which are publicly supported. Estimates of potential college student enrollment show a definite, rapid increase during the 1970s in keeping with comparable increases throughout the rest of the nation.

As 1 of the 10 most wealthy states in the United States, the Commonwealth of Massachusetts can support those social institutions which are considered critical by its citizens. Estimates of the tax base and its potential increases during this decade show that funds can be made available for critical needs. In recent years the Commonwealth has made major increases in support for public higher education, including the Massachusetts State College System. Nevertheless, in terms of effort it still ranks almost at the bottom, indicating that the state's wealth has gone to support other social demands to a greater degree than higher education.

Studies of tax revenues through 1980 clearly indicate that funds will be available to meet a wide variety of social demands during the 1970s.

Specialized manpower needs in Massachusetts have been examined through 1975, using methodology carefully developed by the Bureau of Labor Statistics of the United States Department of Labor. A comparison of these estimates of manpower needs and the availability of students in various curricular fields in the Massachusetts State Colleges shows vividly the diversification in the colleges during the 1960s and their potential in the 1970s. They have important beginning developments in the natural sciences, in engineering sciences, medical and health sciences, law enforcement, and social sciences and social work. An important area for future development is the business and management area. The Massachusetts State Colleges are increasingly comprehensive although they still provide a major part of the

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elementary and secondary teachers needed in Massachusetts. However, their beginning diversification shows clearly that they are poised ready for takeoff in a wide variety of necessary fields. If the citizens of Massachusetts, through their legislature, provide the fiscal support, these institutions can make major contributions to the needs of the Commonwealth for highly trained manpower in the coming decade.

Chapter 2

BACKGROUNDS AND CURRENT TRENDS IN THE MASSACHUSETTS STATE COLLEGE SYSTEM

The creative citizens of the Commonwealth of Massachusetts have been "first" to develop many of the fundamental and critical principles and institutions which are the bedrock of present-day American society. During its early years, from settlement to the early 1800s, it has been described as being perhaps "the most intelligent self-governing Commonwealth in the world." Examples which illustrate this forward-looking approach include the first state board of health, the first state department of insurance, the first minimum wage law for women and children, the first state sanatorium, the first child labor law, the first railroad commission, and the first acknowledgment of the legality of combinations of workingmen. In the field of education the Commonwealth of Massachusetts was the first to establish a state board of education and, of particular importance in this study, it was the first state government to establish institutions for the education of teachers, the normal schools.

Early Historical Developments

In the great Revival of the early 1800s, citizens of Massachusetts took the lead and decided that universal secular education should be strengthened, placed under public control, and supported by public taxation. In 1825 James G. Carter, later to be a member of the legislature and chairman of its Committee on Education, proposed the establishment of public normal schools in an essay outlining the characteristics of an institution for the education of teachers. Carter, Horace Mann, and many other forward-looking citizens and legislators supported the ideas implicit in this proposal and in 1837 the first State Board of Education was established. Horace Mann, President of the Senate in 1837, became the first Secretary of the newly established State Board of Education. Although normal schools were not

established at this session, it became clear that there was an overwhelming sympathy for the idea and in 1839 the forerunners of the Massachusetts State Colleges were established. Edmund Dwight, in March 1838, offered \$10,000 to support their establishment providing the legislature would appropriate a similar amount. The gift from this public-spirited businessman encouraged the legislature and on April 17, 1838, resolves were passed authorizing the State Board of Education to establish three normal schools in three different geographic regions of the state. As a result of this historic action, three normal schools were opened: the first at Lexington on July 3, 1839, the second at Barre on September 3, 1839, and the third at Bridgewater on September 9, 1840. The first normal school was later moved to West Newton and then to Framingham as its permanent location. The second normal school at Barre was moved shortly thereafter to Westfield. The normal school at Bridgewater has not moved and has the honor of occupying the first building built for this purpose in 1846.¹

A recent history of institutions which are similar to the Massachusetts State Colleges² has divided the development of such state colleges and universities into the era of the normal school from the founding of the normal school in Lexington in 1839 up to the present day. These periods are as follows: (a) the era of the normal school, 1839 to approximately 1900, (b) the era of the teachers college from 1900 until approximately 1946, (c) the era of the modern state college from 1946 until the late 1960s, and (d) an overlapping period of development of a limited number of regional state universities during the 1960s and 1970s.

Founding of the State Colleges

All of the institutions in the Massachusetts State College System were founded during the first period, most of them as normal schools. Boston

¹The following four references are basic documents providing information on these important developments. (1) *First State Normal School in America: The State Teachers College at Framingham, Massachusetts, 1839-1939*, The Alumnae Association of The State Teachers College at Framingham, Massachusetts, June 1959. (2) Arthur Clarke Boyden, *The History of Bridgewater Normal School*, Bridgewater Normal Alumni Association, Bridgewater, Massachusetts, 1933. (3) Vernon Lamar Mangun, *The American Normal School, Its Rise and Development in Massachusetts*, Warwick and York, Inc., Baltimore, Maryland, 1928. (4) *The First State Normal School in America, Journals of Cyrus Peirce and Mary Swift*, Harvard Documents in the History of Education, Volume I, Harvard University Press, Cambridge, Massachusetts, 1926.

²*A Study of the Historical Background, Current Status, and Future Plans of the Developing State Colleges and Universities*, Fred F. Harclerod, H. Bradley Sagen, C. Theodore Molen, Jr., U.S. Department of Health, Education, and Welfare, August 1969.

State College was originally established in 1852 as the City Training School for Teachers. A century later, in 1952, as the Teachers College of the City of Boston it was transferred to the Commonwealth of Massachusetts. The fourth normal school, Salem, was established in 1854. Twenty years later the fifth was established in Worcester. Then, four more schools were established in 1894 with Hyannis starting in 1894 (and closing in 1944), Fitchburg in 1895, North Adams in 1896, and Lowell in 1897.

There are two specialized schools in the Massachusetts State College System, the Massachusetts College of Art and the Massachusetts Maritime Academy. The Massachusetts College of Art was established in 1873 as the first Normal Art School in America.³ It followed by 3 years the adoption of the "industrial drawing act" by the Massachusetts legislature which established the requirement that "... in [the] future, every child in schools supported by public taxes shall be taught to draw." The primary purpose of the Normal Art School was to educate future teachers and supervisors of art although in later years curricula were broadened to include several areas of specialization. It followed the principle that children were to be taught "to see and draw correctly, exactly as they were taught to read, write and cipher."⁴ The Normal Art School became nationally and internationally famous for its work in this field through its education display at the Philadelphia Centennial International Exhibition. The Massachusetts College of Art became a part of the state college in 1964, just prior to the establishment of the current form of governance.

In 1891 the Massachusetts Maritime Academy was founded to provide officers for the United States Merchant Marine. Once again it was the first of its kind since it is the oldest operating maritime academy in the United States. It also was integrated into the state college system in 1964.

These 11 institutions—9 general and comprehensive, and 2 specialized—make up the current membership of the Massachusetts State College System. Their history since the 1900s follows roughly in the periods which have been previously described although their development has been slower than comparable institutions in many parts of the country.

³Mary Smith Dean, *A Brief History of the Massachusetts Normal Art School, 1873 to 1923-24*. Reprinted from ten issues of the Massachusetts Normal Art School Alumni Association "Bulletin."

⁴*Ibid.*, p. 9.

Development as State Teachers Colleges

During the early part of this teachers college era, 1909, they were grouped together as a system of normal schools under the direct supervision of the Department of Education. They continued as normal schools until April 1932 when they were formally designated as state teachers colleges. However, they had been authorized to grant the Bachelor of Education Degree in 1921 and the Bachelor of Science in Education in 1922. It was 10 years later that their degree-granting privileges and their 4-year programs resulted in the change in the names of the institutions. Very shortly thereafter, in 1935, they were authorized to confer the Master of Education Degree which is still the primary graduate degree offered in the institutions. In 1950 the Department of Education was authorized to grant the Bachelor of Fine Arts Degree at the Massachusetts School of Art.

Development of State Colleges

In the 1950s the demands of the economy and society of the Commonwealth led to several studies of the programs of the Massachusetts State Teachers Colleges which indicated the growing need for broader curricula and facilities. In 1960 the colleges were renamed as "state colleges," further convincing evidence of the broadening demands which were being made for diversification in their fields of study. Since that time, Bachelor of Arts Degrees and Bachelor of Science Degrees have been developed at the state colleges and the fields of study have constantly diversified. For example, in 1962 and 1963 Bachelor of Science Degree programs were established in such fields as business administration and medical technology. Clearly with the change in title to "state colleges" in 1960, they had entered the state college period of development and were ready for further curricular expansion to meet the evolving needs of the Commonwealth.

Development of the Massachusetts State College System

In September 1962, the Governor of Massachusetts, John A. Volpe, appointed a Special Education Commission "relative to improving and extending educational facilities in the Commonwealth of Massachusetts" (Chapter 108 of the Resolves of 1962). The commission, chaired by Senator Kevin B. Harrington, was composed of representatives of (1) the General Court, (2) private and public institutions of learning, and (3) the public-at-large. Dr. Benjamin C. Willis, Superintendent of Schools for the City of Chicago, was the Executive Director of the Study.

After an exhaustive study, the Commission filed its report in December 1964. The legislation resulting from the report was enacted in June 1965 (Chapters 572, Acts of 1965). This education reform bill, often referred to as the "Willis-Harrington Act," completely reorganized the Department of Education in Massachusetts.

A major change resulting from the legislation was the establishment of three major boards to oversee Massachusetts public education: the Massachusetts Advisory Council on Education, the Board of Education, and the Board of Higher Education. Prior to 1965, the State Board of Education also served as the Board of Trustees for the Massachusetts State Colleges. The state colleges were now assigned their own Board of Trustees (11 members, all laymen), consistent with the procedure governing the other institutions of public higher education. The Board of Trustees of the Massachusetts State College System began operation on January 25, 1966, when Governor Volpe appointed the first lay citizens to be members.

The role of the state colleges, as specified by the Willis-Harrington Report and resultant legislation, is as follows:

The state colleges shall provide educational programs, research, extension, and continuing education services in the liberal, fine and applied arts, in the sciences, and in other related disciplines through the master's degree level.

They shall provide a major emphasis on the preparation of teachers and other professional, educational personnel.⁵

The following quote was released by the Board of Trustees for the Massachusetts State Colleges, shortly after it was formed in 1966.

To meet the challenge of growth and student needs, the Board of Trustees, through committee assignments, is:

1. endeavoring to strengthen every aspect of the system in this new area of development;
2. currently working on a master plan for each campus that will include curriculum expansion as well as a capital building program;
3. actively seeking greater fiscal support;

⁵ *Quality Education for Massachusetts: An Investment in the People of the Commonwealth*, Benjamin C. Willis, Executive Director; the Honorable Kevin B. Harrington, Chairman of the study; the Honorable Thomas C. Wojtkowski, Vice Chairman of the study, December 1964, p. 12.

30 NEW DIMENSIONS OF CONTINUING STUDIES

4. establishing a new and improved salary schedule;
5. recommending new faculty positions and back-up staff;
6. initiating new and diversified programs where need exists.⁶

Much has been done to achieve these goals. The remainder of this chapter will review and emphasize important changes that have occurred in the Massachusetts State College System since the academic year 1965-66, when the Board of Trustees established them. Many critical and important changes have taken place. Comparisons between the situation in 1970 or 1971 and the date nearest to the establishment of the new Board of Trustees are shown below in the areas of (1) finance, (2) library, (3) faculty members and salaries, (4) curriculum, (5) degrees awarded, and (6) student enrollments in (a) undergraduate and graduate programs and in (b) regular and continuing studies programs. In this chapter and throughout this report, two types of programs will be referred to: Regular or Budgeted College Programs, and Continuing Studies Programs. Regular or Budgeted College Programs refer to those programs, both graduate and undergraduate, which are funded by the state. Continuing Studies Programs refer to those programs, both graduate and undergraduate, which are conducted at no expense to the state.

Budget Appropriations

Table 2.1 lists the total appropriated budgets for each of the 11 State Colleges for both the academic year 1965-66 and 1970-71. It also shows the amount and percent of appropriated increase for each college during the 5-year time period. These Table 2.1 figures are more realistically shown in terms of per pupil appropriation in Table 2.2. The largest percentage of appropriated increases per pupil was recorded by Worcester (86%) and the College of Art (84%); the lowest by Framingham (34%). The appropriated increases of the remaining State Colleges ranged from 42% to 72%.

Table 2.3 shows the spending limit for the Continuing Studies Program of the Massachusetts State College System for the 1966 fiscal year was \$1,500,000. In the fiscal year 1971 the spending limit was \$2,740,000. This represents a 5-year increase of \$1,240,000 (83%).

⁶"Creation of a New Board of Trustees for the Massachusetts State Colleges," Board of Trustees, Massachusetts State Colleges, 1966, p. 2.

Library Holdings

Table 2.4 reports the number of library holdings by each Massachusetts State College during the 1967-68 academic year as well as during the 1970-71 academic year. The 3-year increases in holdings are also reported. Lowest percentage increases are recorded by Westfield (33%) and Salem (35%). The Maritime Academy (213%) and the College of Art (131%) represented the highest percentage increases. It should be noted, however, that the high percentage increase in holdings recorded by the Maritime Academy was partially due to the low number of volumes (7,346) which that college held in 1967-68. A total system increase of 308,395 holdings or 67% is also reported.

Faculty Size and Salaries

Five-year faculty size increases are reported in Table 2.5 for each of the 11 State Colleges. The number and percent of increases were based on the 5-year

TABLE 2.1

REGULAR COLLEGE PROGRAM

Comparison of the Total Appropriated Budgets for the
Academic Years 1965-66 and 1970-71^a

College	Appropriated Budget		Appropriated Budget Increase over	
	1965-66	1970-71	1965-66	
	Amount	Amount	Amount	%
Boston	\$ 2,229,780	\$ 6,782,157	\$ 4,552,377	204
Bridgewater	2,126,850	4,926,100	2,799,250	132
Fitchburg	1,555,949	4,008,642	2,452,693	158
Framingham	1,203,045	2,948,700	1,745,655	145
Lowell	754,500	2,905,180	2,150,680	285
North Adams	527,641	1,795,268	1,267,627	240
Salem	1,543,961	5,026,861	3,482,900	226
Westfield	831,534	3,069,440	2,237,906	269
Worcester	1,067,350	3,272,163	2,204,813	207
College of Art	460,425	1,220,214	759,789	165
Maritime Academy	568,486	1,019,990	451,504	79
SYSTEM	\$12,869,521	\$36,974,715	\$24,105,194	187

^aSource: Massachusetts State College System, Central Office—Financial Affairs.

TABLE 2.2

REGULAR COLLEGE PROGRAM

Comparison of the Per Budgeted Student Appropriations
for the Academic Years 1965-66 and 1970-71^a

College	Appropriations per Budgeted Student		Increase over 1965-66	
	1965-66 Amount	1970-71 Amount	Amount	%
Boston	\$ 719	\$1,233	\$ 514	71
Bridgewater	1,063	1,516	453	42
Fitchburg	1,140	1,670	530	46
Framingham	1,071	1,438	367	34
Lowell	786	1,327	541	68
North Adams	1,015	1,632	617	60
Salem	702	1,171	469	66
Westfield	811	1,395	584	72
Worcester	667	1,243	576	86
College of Art	837	1,545	708	84
Maritime Academy	2,842	4,080	1,238	43

^aSource: Massachusetts State College System, Central Office—Financial Affairs.

TABLE 2.3

CONTINUING STUDIES PROGRAM

A Comparison of Continuing Studies Spending Limits
for the Fiscal Years 1966 and 1971^a

Fiscal Year 1966	Fiscal Year 1971	Increase over 1966	
Spending limit	Spending limit	Spending limit	%
\$1,500,000	\$2,740,000	\$1,240,000	83

^aSource: Massachusetts State College System, Central Office—Continuing Studies.

period between academic year 1965-66 and 1970-71. The largest percentage increases were recorded by Lowell (132%), Fitchburg (120%) and Westfield (109%). The College of Art decreased its faculty size by 5 members (11%). The remaining colleges increased their faculty by 26 to 82%.

Table 2.6 indicates the minimum and maximum salary range for Massachusetts State College faculty as they existed in both the academic years 1965-66 and 1970-71. This is illustrated for each of the four faculty ranks. It can be seen from Table 2.6 that Instructor increases over this 5-year period ranged from a low of 23% to a high of 53%; Assistant Professor increases ranged from 27% to 66%; Associate Professor increases ranged from 36% to 84%; and Professor increases ranged from 40% to 94%. The lowest salary increase over the 5-year period amounted to \$1,477; the highest \$12,032. It is interesting to note that, for all ranks, the lowest increases were at the minimum levels.

TABLE 2.4
LIBRARY HOLDINGS^a
A Comparison of the Academic Years
1967-68^b and 1970-71

College	Holdings 1967-68	Holdings 1970-71	Increase over 1967-68	
	N	N	N	%
Boston	41,744	92,000	50,256	120
Bridgewater	44,926	89,000	44,074	98
Fitchburg	46,370	73,000	26,630	57
Framingham	54,000	81,000	27,000	50
Lowell	49,720	83,000	33,280	67
North Adams	33,973	62,600	28,627	84
Salem	63,788	86,400	22,612	35
Westfield	46,462	62,000	15,538	33
Worcester	55,151	80,000	24,849	45
College of Art	15,125	35,000	19,875	131
Maritime Academy	7,346	23,000	15,654	213
SYSTEM	458,605	767,000	308,395	67

^aSource: Massachusetts State College System, Central Office—Academic Affairs.

^bData were not available for the academic year 1965-66.

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Table 2.7 shows that Massachusetts State College faculty salaries (fall 1971) are about average nationally according to AAUP ratings of Public Institutions. Average or mean salaries (including fringe benefits) at each faculty rank were: \$10,127.00 for Instructor; \$12,166.00 for Assistant Professor; \$14,319.00 for Associate Professor; and \$17,742.00 for Professor.

Per course stipends for Massachusetts State College Continuing Studies faculty are recorded in Table 2.8. Course stipends ranged from \$500 (Instructor) to \$760 (Professor) for the 1965-66 academic year. These stipends ranged from \$560 (Instructor) to \$850 (Professor) for the 1970-71 academic year. The 5-year increases represented a flat 12% for all faculty ranks. It should be noted that this increased percentage is extremely small compared to the regular faculty increase ranges reported in Table 2.6.

TABLE 2.5
REGULAR COLLEGE PROGRAM
Number of Faculty^a
Comparison of the Academic Years 1965-66 and 1970-71

College	Number of Faculty 1965-66	Number of Faculty 1970-71	Increase over 1965-66	
	N	N	N	%
Boston	195	306	111	56
Bridgewater	140	214	74	52
Fitchburg	82	181	99	120
Framingham	72	126	54	75
Lowell	59	137	78	132
North Adams	35	64	29	82
Salem	139	244	105	75
Westfield	65	136	71	109
Worcester	94	165	71	75
College of Art	43	38	-5	-11
Maritime Academy	19	24	5	26
SYSTEM	943	1,635	692	73

^aSource: Massachusetts State College System, Central Office—Financial Affairs.

TABLE 2.6
REGULAR COLLEGE PROGRAM
Comparison of the Salary Schedules in Effect during the
Academic Years 1965-66 and 1970-71^a

Rank	Schedule 1965-66		Schedule 1970-71		Increase over 1965-66			
	Min.	Max.	Min.	Max.	Min. %	Max. %		
Professor	\$9,963	\$12,808	\$13,936	\$24,840	\$3,968	40	\$12,032	94
Associate Professor	8,408	10,811	11,461	19,991	3,053	36	9,100	84
Assistant Professor	7,493	9,552	9,516	15,902	2,023	27	6,350	66
Instructor	6,479	8,289	7,956	12,695	1,477	23	4,406	53

^aSource: Massachusetts State College System, Central Office—Financial Affairs.

TABLE 2.7

REGULAR COLLEGE PROGRAM

**Massachusetts State College System: Average Salaries and
Their AAUP Category Ratings for Each Professional Rank
Fall 1971**

Rank	Average (Mean) Salary ^a (Including Fringe Benefits)	AAUP Rating ^b Category II
Professor	\$17,742	5 (\$16,930-\$17,889)
Associate Professor	14,319	5 (\$14,070-\$14,599)
Assistant Professor	12,166	5 (\$11,890-\$12,219)
Instructor	10,127	4 (\$10,000-\$10,239)

^aSource: Massachusetts State College System, Central Office—Financial Affairs.

^bSource: AAUP Report, Category II B—Public Institutions; Ratings run from 1-10, with 10 the lowest.

TABLE 2.8

CONTINUING STUDIES PROGRAM^a

**Comparison of Course Stipends in Effect during
the Academic Years 1965-66 and 1970-71**

Rank	Schedule 1965-66	Schedule 1970-71	Increase over 1965-66 ^b	
	Stipend	Stipend	Stipend	%
Professor	\$760	\$850	\$90	12
Associate Professor	680	765	85	12
Assistant Professor	580	650	70	12
Instructor	500	560	60	12

^aSources: Massachusetts State College System, Central Office—Financial Affairs and Continuing Studies.

^bReflects a 12% raise (1969) consistent with the across-the-board state employee salary increase. Stipend increases were rounded off (e.g., Professor, \$91.20 [12% of \$760] to \$90.00).

Undergraduate Curriculum

Tables 2.9-2.12 illustrate the changes that have occurred in the Regular College undergraduate curriculum offerings from February 1966 to December 1971.

Table 2.9:

Shows the undergraduate majors in existence in February 1966 as well as the type of degree(s) awarded by those colleges which offered these majors.

Table 2.10:

Shows which colleges added undergraduate majors to their curriculum (1966-1971) which were already in existence at other state colleges in 1966; it also indicates the type of degree(s) awarded.

Table 2.11:

Shows the new undergraduate majors added (1966-1971) and the type of degree(s) awarded by those colleges offering them—none of these majors was offered at any of the Massachusetts State Colleges prior to February 1966.

Table 2.12:

Shows the undergraduate majors in existence in December 1971 as well as the type of degree(s) awarded by those colleges offering these majors.

Table 2.13 presents a summary of the preceding four tables. In February 1966 there were 40 majors in existence. The changes in the curriculum offerings between February 1966 and December 1971 are as follows:

1. 40 majors were in existence in February 1966 (Table 2.9).
2. 10, or 25%, of the 40 majors (1966) are no longer offered. Some of these majors were discontinued. Some underwent a course revision and are no longer offered by the same title (Ceramics; Design-Advertising; Design-Product; Education (K-Prim.); General Science-Math.; Math.-Science; Marine and Electrical Engineering; Nautical Science; Painting and Illustration; and Social Studies.
3. 11, or 32%, of the 40 majors (1966) have not been expanded; that is, no additional colleges have added them to their curriculum.

TABLE 2.9
REGULAR COLLEGE PROGRAM
Undergraduate Majors in Existence—February 1966^a

Majors	Boston	Bridgewater	Fitchburg	Framingham	Lowell	No. Adams	Salem	Westfield	Worcester	Mass. Art	Mass. M.
Art Education											
Biology	BS/BA	BA	BS(Ed)/BA	BA	BS/BA	BA	BA			BS(Ed)	
Business Administration											
Business Education										BS	
Ceramics										BS	
Chemistry	BS/BA	BA	BS(Ed)			BA	BA			BFA	
Design-Advertising											
Design-Product										BFA	
Earth Science										BFA	
Economics											
Education (Elem.)	BS(Ed)	BS(Ed)	BS(Ed)	BS(Ed)	BS(Ed)	BS(Ed)	BS(Ed)	BS(Ed)	BS(Ed)		
Education (Jr. High)											
Education (K-Prim.)	BS(Ed)	BS(Ed)				BS(Ed)					
Education (Phys. Ed. -W)		BS(Ed)								BS(Ed)	
Education (Spec. Ed.)			BS(Ed)								
English	BS/BA	BA	BS(Ed)/BA	BA	BA	BA	BA	BA	BA		
Fashion Design & Illus.											
French	BS/BA	BA			BA		BA	BA	BA	BFA	
General Science			BS(Ed)								
General Science-Math.									BS(Ed)		
Geography	BS/BA	BA	BS(Ed)				BS(Ed)			BS	

German	BS									
History	BS/BA	BA	BS(Ed)/BA	BA	BA	BA	BA	BA	BA	BA
Home Economics	BS(Ed)									
Industrial Arts	BS(Ed)									
Latin American Studies	BS/BA									
Mathematics	BS/BA	BA	BS(Ed)		BA	BA	BA	BA	BS(Ed)	BS
Math-Science										
Marine & Elec. Engr.										
Medical Technology			BS	BS	BS	BS				
Music				EM(Ed)						BS
Nautical Science										
Nursing			BS							
Painting & Illus.										BFA
Physics	BS/BA	BA	BS(Ed)		BA					
Political Science	BS/BA						BA			
Psychology	BS/BA							BS(Ed)	BA	BA
Social Science										
Social Studies										
Spanish	BS/BA					BA	BA	BA		

^aSource: Massachusetts State College System, Central Office—Academic Affairs.

TABLE 2.10
REGULAR COLLEGE PROGRAM
Expansion into Additional Colleges of Undergraduate Majors in Existence in the System in 1966
February 1966 to December 1971

Majors	Boston	Bridgewater	Fitchburg	Frammingham	Lowell	No. Adams	Salem	Westfield	Worcester	Mass. Art	Mass. M.
Biology											
Business Administration						BS		BS			
Chemistry			BA	BA	BA				BA		
Earth Science	BS/BA			BA			BA				
Economics	BS/BA										
Education (Phys. Ed. -W)	BS/BA								BA		
Education (Spec. Ed.)		BS(Ed)						BS			
French				BA		BA		BS(Ed)			
Geography				BA							
German	BS/BA								BA		
Mathematics				BA	BA						
Medical Technology					BS				BA		
Music					BM						
Nursing					BS			BA			
Physics			BA				BS				
Political Science					BA				BA		
Psychology	BA	BS/BA	BA			BA	BA			BA	
Social Science								BA			
Spanish				BA						BA	

TABLE 2.11
REGULAR COLLEGE PROGRAM
New Undergraduate Majors Added—February 1966 to December 1971^a

Majors	Boston	Bridgewater	Fitchburg	Framingham	Lowell	No. Adams	Salem	Westfield	Worcester	Mass. Art	Mass. M.
Afro-American Studies	BA/BS										
Art				BA					BA		
Anthropology		BA									
Chemistry-Geology		BA									
Design-Environmental										BFA	
Design-3 Dimensional										BFA	
Design-Graphic										BFA	
Design-Industrial										BFA	
Education (Early Child)			BS(Ed)	BS(Ed)	BS(Ed)	BS(Ed)	BS(Ed)	BS(Ed)			
Education (Phys. Ed.-M)	BS/BA							BS			
General Studies								BA			
Industrial Science			BS								
Law Enforcement	BS/BA							BA			
Marine Engineering										BS	
Marine Transportation										BS	
Metropolitan Studies	BA/BS										
Modern Languages					BA						
Natural Science	BS/BA								BA		
Painting										BFA	
Philosophy	BA/BS				BA						

[Continued]

Table 2.11 [Continued]

Majors	Boston	Bridgewater	Fitchburg	Framingham	Lowell	No. Adams	Salem	Westfield	Worcester	Mass. Art	Mass. M.
Photography/Film											
Printmaking										BFA	
Social Service										BFA	
Sociology		BA/BS	BA		BA		BA/BS				
Speech/Theatre			BA						BA		

^aIncludes only majors that were not offered at any of the Massachusetts State Colleges prior to February 1966. (Source: Massachusetts State College System, Central Office—Academic Affairs.)

TABLE 2.12

REGULAR COLLEGE PROGRAM

Undergraduate Majors in Existence—December 1971^a

Majors	Boston	Bridgewater	Fitchburg	Framingham	Lowell	No. Adams	Salem	Westfield	Worcester	Mass. Art	Mass. M.
Afro-American Studies	BS/BA										
Anthropology											
Art Education		BA									
Art											
Biology	BS/BA	BA	BS(Ed)/BA	BA	BS/BA	BA	BA	BS	BA		
				BA						BS(Ed)	

[Continued]

Table 2.12 [Continued]

Majors	Boston	Bridgewater	Fitchburg	Framingham	Lowell	No. Adams	Salem	Westfield	Worcester	Mass. Art.	Mass. M.
Marine Engineering											BS
Marine Transportation											BS
Mathematics	BS/BA	BA	BS(Ed)	BA	BA	BA	BA	BA	BA		
Medical Technology			BS	BS	BS	BS					
Metropolitan Studies	BS/BA										
Modern Languages					BA						
Music					BM(Ed) BM/BA		BA				
Natural Science	BS/BA								BA		
Nursing			BS		BS		BS				
Painting										BFA	
Photography/Film										BFA	
Physics	BS/BA	BA	BS(Ed)/BA		BA				BA		
Philosophy	BS/BA				BA						
Political Science	BS/BA				BA		BA				
Psychology	BS/BA	BA	BS/BA	BA		BA	BA	BA	BA		
Printmaking										BFA	
Sociology	BS/BA	BA			BA				BA		
Social Science								BA			
Social Service							BS/BA				
Spanish	BS/BA			BA				BA	BA		
Speech/Theatre		BA									

^aSource: Massachusetts State College System, Central Office—Academic Affairs.

TABLE 2.13
REGULAR COLLEGE PROGRAM
 Summary of Additions, Deletions, and Expansion of
 Undergraduate Majors 1965-66

Category	<i>N</i>
Number of majors in existence in 1966	40
Number of 1966 majors that have been totally or partially discontinued	10
Number of 1966 majors added by other colleges since 1966	18
Number of new majors added since 1966	25
Number of 1966 majors still in existence	30
Number of majors in existence in 1971	55

4. 18, or 45%, of the 40 majors (1966) have been expanded, that is, at least one college not offering 1 of these 18 majors in 1966 has added it to its curriculum (Table 2.10).
5. 25 majors that were not offered at any Massachusetts State College in 1966 were added as curriculum offerings at one or more colleges between 1966 and 1971 (Table 2.11).
6. 55 majors were in existence, as of December 1971 (Table 2.12).
7. 30, or 54%, of the 55 majors now in existence were also offered in 1966.
8. 25 of the 56 majors now in existence are new, and thus reflect a 45% growth factor. Clearly, the Board of Trustees has "initiated new and diversified programs where need exists."

Inspection of Tables 2.9-2.12 also reveals a shift in the types of degrees being awarded. It can be seen that in 1966, at least one college awarded an "Education" designated degree (e.g., BS (Ed)/BM (Ed)) for 20, or 50%, of the 40 majors. However, only 1 of the 18 expanded majors and 1 of the 25 new majors are "Education" designated degrees. Currently, the "Education" designated degree is awarded by one or more colleges for only 17, or 31%, of

the existing majors. In fact, even this figure is deceptively high, since in several cases only one college awards "Education" designated degrees for these majors. However, to conclude that the state colleges are preparing fewer teachers would be erroneous. This is illustrated in Table 2.14, where 81% of all the degrees awarded in June 1971 were classified as teaching oriented. This does not necessarily mean "Education" designated degrees, as the term "teaching-oriented" includes minors in education as well as majors. In sum, the Massachusetts State Colleges are still very much in the teacher preparation business. However, in most cases new majors have been in content areas with education being offered as an elective minor. This change in curriculum structure is consistent with that at the national level and as was shown in Chapter 1, the Massachusetts State College System has a good curricular base for far wider service to the future economic and social development of the state.

An overview of the undergraduate course and degree offerings through Continuing Studies for the fiscal years 1966 and 1971 is reported in Table

TABLE 2.14
REGULAR COLLEGE PROGRAM
Comparison of Teaching Orientation Versus Nonteaching Orientation
Bachelor's Degrees Awarded, June 1971^a

College	Teaching Orientation %	Nonteaching Orientation %
Boston	73	27
Bridgewater	90	10
Fitchburg	81	19
Framingham	93	7
Lowell	84	16
North Adams	89	11
Salem	82	18
Westfield	94	6
Worcester	88	12
College of Art	21	79
Maritime Academy	0	100
SYSTEM	81	19

^aSource: Massachusetts State College System, Central Office—Academic Affairs.

2.15. The Maritime Academy has never had a Continuing Studies Program. In 1966, undergraduate courses were offered at the other 10 state colleges, but 4 of the colleges (Fitchburg, Framingham, Lowell, and the College of Art) did not award degrees through Continuing Studies. Lowell discontinued offering Continuing Studies courses in 1968. Thus, in 1971, 2 colleges did not have a program, 3 colleges offered courses only, and 6 colleges offered both courses and degrees through Continuing Studies.

A comparison of the undergraduate majors offered in Continuing Studies for the fiscal years 1966 and 1971 was virtually impossible. The problem centers around whether the degree is actually awarded by the Regular College Program or by the Continuing Studies Program.

Currently, Lowell and the Maritime Academy do not have Continuing Studies Programs. No undergraduate degrees are awarded by Continuing Studies at the College of Art, but courses are offered on a very limited basis. It is impossible to complete all the course requirements for any major offered by

TABLE 2.15
CONTINUING STUDIES PROGRAM
Undergraduate Course and Degree Offerings
Fiscal Years 1966 and 1971^a

College	No Program		Only Courses Offered		Courses and Degrees Offered	
	1965	1971	1966	1971	1966	1971
Boston					X	X
Bridgewater					X	X
Fitchburg			X	X		
Framingham			X	X		
Lowell		X	X			
North Adams					X	X
Salem					X	X
Westfield					X	X
Worcester					X	X
College of Art			X	X		
Maritime Academy	X	X				

^aSources: Massachusetts State College System, Central Office—Continuing Studies; verified by each college.

the College of Art through Continuing Studies. The program could be classified as a service program, since the program is not degree oriented. The cases of Fitchburg and Framingham are quite different from the College of Art. Although they offer only courses, their programs are quite extensive. At both colleges, it is possible to complete all of the course requirements for several majors in Continuing Studies, and most of the course requirements for several other majors. However, since the degrees are awarded by the Regular College Program, neither college lists majors for their undergraduate Continuing Studies Programs. In contrast, the other seven colleges offer undergraduate courses and degrees through Continuing Studies. At two colleges (Boston and Worcester) the program is restricted to one major while in others, the curriculum offerings are almost as diversified as the Regular College Program. For example, at Bridgewater, it is possible to complete the requirements of almost every major offered in the Regular College Program through its Continuing Studies Program. However, to list the Continuing Studies Undergraduate majors for these seven colleges would be deceiving. It is possible in some cases to complete all the course requirements for the major through the Continuing Studies Program but be awarded the degree by the Regular College since the major is not on the college's Continuing Studies list of majors.

For the reasons cited above, it was impossible to compare undergraduate majors offered in Continuing Studies for the fiscal years 1966 and 1971. However, there are other ways to determine if growth occurred during this time, such as, from the number of courses offered and from student enrollments. These points will be taken up in the next two sections of this chapter. Also, an analysis of the current Continuing Studies undergraduate curriculum will be discussed in Chapter 3.

Undergraduate Student Enrollments

Growth in terms of student enrollments (1966-1971) for each college as well as the State College System is depicted in Tables 2.16-2.21. In the undergraduate Regular College Program, the total system student enrollment increased from 15,015 in 1965-66 to 27,393 in 1970-71, representing an increase of 12,348 students or 82% (Table 2.16). The biggest percentage increase occurred at North Adams (150%), with the smallest at the Maritime Academy (30%). The biggest increase in terms of numbers of students occurred at Salem (2,094) with the smallest again at the Maritime Academy (58). Three of the colleges (Fitchburg, North Adams, Westfield) more than doubled in size, one (Maritime Academy) grew about one-third (30%); while

the remaining seven saw gains ranging from 61% to 91%. The three largest colleges in 1970-71 were Boston (5,445), Salem (4,395), and Bridgewater (3,303), while the Maritime Academy (252) and the College of Art (804) were the smallest. The others ranged from 1,257 to 2,928.

Students enrolled in the Evening Colleges at Boston and Fitchburg were included in the total student enrollments. Both of these colleges operate undergraduate programs in the evening which are funded as part of the Regular College Program. A breakdown for the academic year 1970-71 is included in Table 2.17. Head counts for the spring and fall semesters and the estimated FTEs for the academic year are reported. The estimated FTEs for Boston and Fitchburg were 699 and 325, respectively. Note also that Fitchburg conducts an off-campus program at several Raytheon Company plants in Andover, Bedford, and Lowell. This program is fully funded by Raytheon and had an FTE of 434 for the academic year 1970-71. The Fitchburg-Raytheon student enrollment figures were not included in Table 2.16 since technically those figures in the table represented students in

TABLE 2.16
REGULAR COLLEGE PROGRAM
Undergraduate Student Enrollments^a
A Comparison of the Academic Years 1965-66 and 1970-71

College	1965-66	1970-71	Increase	
	N	N	N	%
Boston	3,366	5,445	2,079	61
Bridgewater	2,017	3,303	1,286	63
Fitchburg	1,329	2,928	1,599	120
Framingham	1,133	2,171	1,038	91
Lowell	1,083	1,879	796	73
North Adams	502	1,257	755	150
Salem	2,301	4,395	2,094	91
Westfield	1,096	2,210	1,114	101
Worcester	1,494	2,749	1,225	84
College of Art	500	804	304	61
Maritime Academy	194	252	58	30
SYSTEM	15,015	27,393	12,348	82

^aSources: Massachusetts State College System, Central Office—Academic Affairs; verified by each college.

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Regular College programs that are fully funded by the Commonwealth of Massachusetts. However, they really do not belong in Continuing Studies either, since the program is under the Director of the Evening College and it is financially independent.

Students may enroll in either program at Fitchburg on a part-time or full-time basis. One degree is awarded, the Bachelor of Science in Industrial Sciences with areas of concentrations with Raytheon in Computer Science, Electrical Engineering, and Industrial Management. The Fitchburg Evening College options are Electrical or Manufacturing Technology, very close to electronic and mechanical engineering. For the most part, students at Boston are all full-time. The Bachelor of Science degree is offered with majors in English and history. Both degrees at Boston are classified as nonteaching.

TABLE 2.17
SPECIAL UNDERGRADUATE PROGRAMS^a
Sources of Funds, Student Enrollments and
Estimated Full-Time Equivalents (FTE)
for the Academic Year 1970-71

College	Sources of Funds	Head Count Fall 1970-71	Head Count Spring 1970-71	Estimated FTE ^b for the Academic Year 1970-71
Boston Evening College	Regular Budgeted College Program	700	698	699
Fitchburg Evening College	Regular Budgeted College Program	542	432	325
Fitchburg Off-Campus at Several Raytheon Co. Plants	Fully Funded by Raytheon	576	727	434
SYSTEM		1,818	1,857	1,458

^aSources: Directors of the Evening Colleges at Boston and Fitchburg.

^bThe FTE for the Evening Colleges at Boston and Fitchburg are included in the student enrollment reported in Table 2.16. The FTE for the Raytheon program at Fitchburg is not included in Table 2.16.

Faculty of both Evening Colleges are part of the Regular College faculty. Some teach full time in the Evening College while others teach part of their load in the Regular College. These courses are not taught as an overload or for an additional stipend as in Continuing Studies. The extent of part-time visiting lecturers is no greater than that of the Regular Day College. However, this is not true of the Fitchburg-Raytheon program. Because of the highly specialized course offerings and level, participation of Fitchburg faculty has been limited to about 20%. The bulk of the faculty are highly trained personnel from Raytheon. The faculty were carefully selected and are continuously evaluated in terms of their teaching ability.

There are difficult problems in attempting to compare (1966-1971) head counts and FTEs for the Continuing Studies Program. Total head counts for each of the three semesters of the fiscal year 1966 were available for each college. However, in several cases a clear distinction between undergraduate and graduate students could not be made. This resulted from the fact that a sizeable number of the courses carried an "X" designation which meant that either graduates or undergraduates could receive credit for the course. However, from the data in the Tables 2.18-2.20, it can be concluded that significant growth occurred in Continuing Studies student enrollment.

The total number of undergraduate and graduate courses offered in 1966 was 1,553 (Table 2.18). In 1971 the total number of course offerings was 2,422, showing an increase of 972 courses or 63% over 1966. Similar combined graduate and undergraduate system growth is in Tables 2.19 and 2.20. The system increases over 1966 for total course enrollments (Table 2.19) and multiple semester head counts (2.20) were 57% and 60%, respectively.

For purposes of this report, total course enrollment is defined as the total number enrolled in all courses. Thus, over the fiscal year some students might be counted six times while others were counted only once. Head count statistics were available for each of the three semesters in both fiscal years (e.g., Salem: summer 1965-1,246; fall 1965-2,079; spring 1965-2,154; total fiscal 1966-5,479). In the spring of 1966, 2,154 different students enrolled in Continuing Studies courses at Salem; however, there is no way of telling how many of these 2,154 are also counted in as part of the 2,079 students who took courses in the fall semester. As a result, no pure head count for the fiscal year was available (Salem was used to illustrate the problem; however, it should be noted that a pure head count was available at Salem). Several colleges were able to supply pure fiscal year head counts but since these were not available for all colleges, a different but less desirable statistic had to be used. This statistic, multiple semester head count, is the

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total of the head counts for each of the three semesters. Thus, the multiple semester head count of 5,479 for Salem does not represent 5,479 different students during the fiscal year 1966. Although this statistic is somewhat valid in terms of system growth, its validity for individual colleges is suspect.

The three largest programs in terms of courses offered in 1971 were at Boston (499), Bridgewater (479), and Salem (436), while the smallest was at the College of Art (40) (Table 2.18). This was also true concerning course enrollments (Table 2.19). For the most part, increases in course offerings by individual colleges paralleled their increases in course enrollments. Exceptions were at Framingham, Westfield, and Worcester. At Framingham, an 85%

TABLE 2.18

CONTINUING STUDIES PROGRAM

**Total Number of Undergraduate and Graduate Courses Offered^a
Comparison of the Fiscal Years 1966 and 1971**

College	Courses Offered 1966	Courses Offered 1971	Increase over 1966	
	N	N	N	%
Boston	270	499	229	85
Bridgewater	345 ^b	479 ^c	134	40
Fitchburg	62	138	76	123
Framingham	123	227	104	85
Lowell	33 ^d	NP ^e	—	—
North Adams	115	149	34	30
Salem	297	436	139	47
Westfield	168	289	121	72
Worcester	122	165	43	35
College of Art	18 ^d	40	22	122
Maritime Academy	NP ^f	NP ^f	—	—
SYSTEM	1,553	2,422	972	63

^aSource: Massachusetts State College System, Central Office—Continuing Studies.

^bIncludes 21 courses offered at Hyannis during the summer session.

^cIncludes 17 courses offered at Hyannis during the summer session.

^dOffered courses in Continuing Studies but did not offer degrees.

^eDiscontinued offering courses in Continuing Studies in the fiscal year 1968.

^fNo Continuing Studies Program—Courses or Degrees.

increase in courses was accompanied by a 122% increase in course enrollments. The inverse was true at Westfield and Worcester, where 72 and 35% increases in courses were accompanied by only 43 and 7% increases in student enrollments.

Table 2.21 sheds some light on the size of the undergraduate Continuing Studies Program. In the spring 1971, a total of 5,172 different students was enrolled in courses, yielding FTE of 1,459. The two largest programs were at Bridgewater (FTE-504) and Salem (FTE-313). Framingham has a larger head count than Salem but its FTE of 230 was considerably lower. The programs at Fitchburg, Worcester, and the College of Art were exceptionally small in terms of FTEs.

TABLE 2.19
CONTINUING STUDIES PROGRAM
Combined Undergraduate and Graduate Total Course Enrollments^a
Fiscal Years 1966 and 1971

College	Total Course Enrollments 1966	Total Course Enrollments 1971	Increase over 1966 Total Course Enrollments	
	N	N	N	%
Boston	7,368	14,452	7,084	96
Bridgewater	8,649	12,871	4,222	49
Fitchburg	1,600	3,634	2,034	127
Framingham	2,768	6,150	3,382	122
Lowell	1,004	NP ^b	---	---
North Adams	2,285	2,965	680	30
Salem	8,219	11,079	2,860	35
Westfield	3,867	5,542	1,675	43
Worcester	3,567	3,828	261	7
College of Art	368	812	444	121
Maritime Academy	NP ^b	NP ^b	---	---
SYSTEM	39,695	61,333	22,642	57

^aSource: Massachusetts State College System, Central Office-Continuing Studies.

^bNP = No Continuing Studies Program.

Undergraduate Degrees Awarded

Increases in the number of undergraduate degrees awarded at each college are shown in Table 2.22. The data represent the combined Regular College and Continuing Studies Programs. Combined data were necessary since some of the colleges do not award degrees through Continuing Studies, and others award degrees through Continuing Studies for a limited number of majors.

Table 2.22 reveals changes from minus 4% (College of Art) to a high increase of 170% (Westfield). The total System increase was 100%. Five of the colleges had increases of over 100%: Westfield, 170%; Lowell, 141%; Boston, 126%; Fitchburg, 111%; Salem, 109%. With the exception of the College of Art which had a decrease of 4%, the other five colleges experienced increases ranging from 64% to 98%.

TABLE 2.20

CONTINUING STUDIES PROGRAM

Combined Undergraduate and Graduate Multiple Semester Head Counts^a
Fiscal Years 1966 and 1971

College	Multiple Semester Head Count 1966	Multiple Semester Head Count 1971	Increase over 1966	
	<i>N</i>	<i>N</i>	<i>N</i>	%
Boston	4,912	8,935	4,023	82
Bridgewater	5,756	8,477	2,721	46
Fitchburg	1,033	2,400	1,367	132
Framingham	1,845	4,810	2,965	161
Lowell	669	NP ^b	—	—
North Adams	1,523	2,045	522	34
Salem	5,479	7,519	2,040	37
Westfield	2,578	3,884	1,316	51
Worcester	2,378	2,869	491	21
College of Art	245	647	402	164
Maritime Academy	NP ^b	NP ^b	—	—
SYSTEM	26,418	41,586	15,847	60

^aSource: Massachusetts State College System, Central Office—Continuing Studies.

^bNP = No Continuing Studies Program.

In Table 2.23, a breakdown of the number of degrees awarded and the source of funding for the fiscal years 1966 and 1971 are reported. Note that of the 646 degrees awarded at Bridgewater in 1971, 95 were from Continuing Studies whereas no degrees are listed for Continuing Studies at Fitchburg or Framingham because all degrees are awarded through the Regular College program. It should also be pointed out that the relatively small number of degrees awarded through Continuing Studies does not accurately reflect the sizes of the programs. The numbers are limited because in many cases the actual awarding of the degree is done by the Regular College. This is not meant to be a criticism of either one of the administrative approaches to degree granting, but merely to point out that the size and/or growth of the undergraduate Continuing Studies Program cannot be interpreted in terms of the numbers of degrees awarded.

TABLE 2.21
CONTINUING STUDIES PROGRAM
Total Head Count and Full-Time Equivalent (FTE)
for the Spring Semester Only^a
Undergraduates, Spring 1971

College	Total Head Count <i>N</i>	Full-Time Equivalent <i>N</i>
Boston	354	128
Bridgewater	1,640	504
Fitchburg	10	3
Framingham	1,148	230
Lowell	NP ^b	—
North Adams	298	99
Salem	1,050	313
Westfield	505	140
Worcester	23	5
College of Art	144	37
Maritime Academy	NP ^b	—
SYSTEM	5,172	1,459

^aSource: Massachusetts State College System, Central Office—Continuing Studies.

^bNP = No Continuing Studies Program.

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Graduate Program Overview

An analysis of graduate course and degree offerings for the fiscal years 1966 and 1971 is presented in Table 2.24. The only college that has never offered graduate courses or degrees is the Maritime Academy. In 1966, Lowell and the College of Art offered graduate courses through Continuing Studies, but neither awarded the Master's Degree. In 1968, Lowell discontinued offering graduate courses in Continuing Studies, whereas in 1971, the College of Art began awarding the Master of Science in Art Education. The remaining eight colleges offered both graduate courses and degrees in 1966 and 1971 through Continuing Studies. In sum, all but Lowell and the Maritime Academy currently offer graduate courses and degrees through Continuing Studies.

In 1966, Boston and Salem had graduate programs as part of their Regular College programs that were fully funded by the state rather than through Continuing Studies. Both programs were relatively small with student

TABLE 2.22
BACHELOR'S DEGREES AWARDED
REGULAR COLLEGE AND CONTINUING STUDIES PROGRAMS
Comparison of the Fiscal Years 1966 and 1971^a

College	Bachelor's Degrees Awarded-1966	Bachelor's Degrees Awarded-1971	Increase over 1966	
	N	N	N	%
Boston	435	982	547	126
Bridgewater	363	646	282	78
Fitchburg	216	456	240	111
Framingham	217	356	139	64
Lowell	137	330	193	141
North Adams	99	196	97	98
Salem	369	772	403	109
Westfield	173	467	294	170
Worcester	225	386	161	72
College of Art	108	104	-4	-4
Maritime Academy	42	75	33	79
SYSTEM	2,384	4,770	2,385	100

^aSources: Massachusetts State College System, Central Office—Academic Affairs and Continuing Studies; verified by each college.

TABLE 2.23
BACHELOR'S DEGREES AWARDED

Breakdown of the Number of Degrees Awarded
and the Source of Funding^a
Fiscal Years 1966 and 1971

College	Regular College Budgeted Program						Continuing Studies			
	Day College		Evening College		Total		1966		1971	
	1966	1971	1966	1971	1966	1971	1966	1971	1966	1971
Boston	415	937	15		415	952	20	30	435	982
Bridgewater	338	551			338	551	25	95	363	646
Fitchburg	216	433	23		216	456	C ^b	C ^b	216	456
Frammingham	217	356			217	356	C ^b	C ^b	217	356
Lowell	137	330			137	330	C ^b	NP ^c	137	330
North Adams	53	181			53	181	46	15	99	196
Salem	338	737			338	737	31	35	369	772
Westfield	159	450			159	450	14	17	173	467
Worcester	220	383			220	383	5	3	225	386
College of Art	108	104			108	104	C ^b	C ^b	108	104
Maritime Academy	42	75			42	75	NP ^c		42	75
SYSTEM	2,243	4,537	38		2,243	4,575	141	195	2,384	4,770

^aSource: Data were supplied by each college.

^bC = Undergraduate courses offered but all degrees are awarded by the day college.

^cNP = No Continuing Studies Program.

TABLE 2.24
GRADUATE PROGRAMS^a
Regular and Continuing Studies Programs
Graduate Course and Degree Offerings—Fiscal Years 1966 and 1971

College	Budgeted College Program						Continuing Studies					
	No Program		Courses Only		Courses/Degrees		No Program		Courses Only		Courses/Degrees	
	1966	1971	1966	1971	1966	1971	1966	1971	1966	1971	1966	1971
Boston					X	X					X	X
Bridgewater	X			X							X	X
Fitchburg	X	X									X	X
Framingham	X					X					X	X
Lowell	X					X		X				
North Adams	X	X									X	X
Salem		X			X						X	X
Westfield	X	X									X	X
Worcester	X	X									X	X
College of Art	X			X ^b						X		
Maritime Academy	X	X					X	X				

^aSources: Information supplied by each college.
^bStarted offering graduate courses in the current academic year (1971-72).

enrollments of 80 at Boston and 11 at Salem. Salem discontinued its program in 1970. As of 1971, three colleges were offering Regular College graduate programs (Boston, Framingham, Lowell). In addition, Bridgewater was offering limited coursework, and the College of Art initiated a similar program during the current academic year (1971-72). Although there has been some growth in state support for graduate education between 1966 and 1971, clearly it is limited in amount and to only a few students attending particular colleges.

Regular College Graduate Programs

Table 2.25 contains a breakdown of current (1971-72) student enrollments in graduate programs funded as part of the Regular College program. The total head count for the System during the current academic year is 729, with a full-time equivalent of 367. Lowell and Boston have by far the two biggest programs (Lowell FTE—188; Boston FTE—125). The other three are relatively small, with FTEs ranging from 8 to 31. A comparison of the head counts and FTEs for the academic years 1965-66 and 1971-72 are located in Table 2.26. In 1965-66 the head count at Boston was 80 and at Salem it was 11. Since all

TABLE 2.25
REGULAR COLLEGE PROGRAM
Master's Degree Programs

Head Counts and Full-Time Equivalents (FTE) for the
Current Academic Year 1971-72^a

College	Head Count Full-Time	Head Count Part-Time	FTE for Part-Time	Head Count Total	FTE Total
Boston	125			125	125
Bridgewater	6	6	2	12	8
Lowell	28	518	160	546	188
Framingham	31			31	31
Salem	D ^b				
College of Art	15			15	15
SYSTEM	205	524	162	729	367

^aSource: HEGIS Reports submitted by each college in November 1971; verified by each college.

^bD = Discontinued program at the end of the academic year 1969-70.

students were full time, the total head counts and FTEs for both colleges and the System were the same (System-91). Thus, the System has experienced a head count increase of 638 (701%) and an FTE increase of 276 (303%) over 1965-66.

At Boston, the graduate school offers a program leading to the degree Master of Education, as part of the Regular College program. The purpose of the program is to prepare graduates of colleges and universities for teaching at either the elementary or secondary level. At the elementary level, Elementary Curriculum is the only major available. At the secondary level, students may elect from one of the following major fields: biology, English, geography, history, mathematics, modern languages, political science, science (see Table 2.27).

Students must register on a full-time basis, and the tuition rate is the same as that charged undergraduates in the Regular College program (\$100 per semester). All courses are conducted during the regular school day. The program operates during the academic year only. Faculty are part of the Regular College, and courses are taught as part of the faculty member's normal teaching load. No part-time faculty (visiting lecturers) are used in the program.

Boston also operates a graduate program in Continuing Studies (late evenings and summer sessions), but these two programs are completely independent.

TABLE 2.26

REGULAR COLLEGE PROGRAM
Master's Degree Programs

**A Comparison of System Head Counts and Full-Time Equivalents (FTE)
for the Academic Years 1965-66 and 1971-72^a**

System Head Count 1965-66	System Head Count 1970-71	System Head Count Increase		System FTE 1965-66	System FTE 1970-71	System FTE Increase	
<i>N</i>	<i>N</i>	<i>N</i>	%	<i>N</i>	<i>N</i>	<i>N</i>	%
91	729	638	701	91	367	276	303

^aSources: The 1965-66 data were obtained from the Directors of Graduate Studies; 1971-72 data were taken from the HEGIS Reports submitted by each college in November 1971.

Continuing Studies graduate students cannot enroll in a Regular College graduate course. In rare cases, Regular Day College graduate students enroll in Continuing Studies courses, but they must pay Continuing Studies fees for such courses (\$18 per credit) in addition to their regular \$100 semester fee. All tuition fees collected by the Regular Day College are turned over to the General Fund of the State Treasury (same as the procedure followed for undergraduate Regular College program students). Any tuition fees for Continuing Studies courses are turned over to the Continuing Studies Office of the Massachusetts State College System. Continuing Studies is not a funded program, it is an "expenditure of receipts" program. The financial structure of Continuing Studies Programs will be fully explored in Chapter 3.

TABLE 2.27
REGULAR COLLEGE PROGRAM
Graduate Majors in Existence—December 1971^a

	Boston	Bridgewater ^b	Framingham	Lowell	College of Art ^b
Administration/Supervision				MEd	
Biology (Sec.)	MEd		MEd		
Curriculum (Elem.)	MEd		MEd		
Elementary Education					MEd
English (Sec.)	MEd		MEd		
Food and Nutrition			MS		
Geography (Sec.)	MEd				
History (Sec.)	MEd				
Home Economics			MEd		
Home Economics Education			MEd		
Mathematics (Elem.)			MEd		
Mathematics (Sec.)	MEd		MEd		
Modern Languages (Sec.)	MEd				
Music Education					MMEd
Political Science (Sec.)	MEd				
Reading					MEd
Science (Elem.)			MEd		
Science (Sec.)	MEd				
Social Studies (Elem.)			MEd		
Social Studies (Sec.)			MEd		

^aSources: Information supplied by the Director of Graduate Studies at each college.

^bLimited Graduate course offerings as part of the Regular College Program, but all degrees are awarded through Continuing Studies.

Administratively, the programs at Framingham and Boston are quite similar. Students at Framingham must enroll as full-time day students, and the program runs during the academic year only. The college's Continuing Studies graduate program operates evenings during the academic year, as well as during the summer session. The tuition rate is \$100 per semester. Continuing Studies graduate students cannot enroll in a Regular Day college graduate course. Regular Day College graduate students pay extra tuition fees for any Continuing Studies courses they take (\$18 per credit). Tuition fees collected by the Day College are returned to the General Fund of the state while those collected by Continuing Studies are turned over to the Continuing Studies Office of the Massachusetts State College System. All faculty members are members of the Regular College Program, and courses taught in the Regular Day College graduate program are done as part of the faculty member's regular teaching load—not as an overload or for an additional stipend. All faculty in the Regular Day College graduate program are full time, although part of their teaching might be done at the undergraduate level. The day College graduate school awards both the Master of Education and the Master of Science degrees.

In 1966, Lowell offered undergraduate and graduate courses through Continuing Studies but did not award degrees at either level. Course offerings were discontinued in 1968, so that currently there is no Continuing Studies Program at either the graduate or undergraduate levels. Since that time the college has initiated a fully funded graduate program as part of its Regular College program.

Although the program is similar to those at Boston and Framingham, it does differ considerably in some respects.

1. Regular College graduate courses are conducted in the evening as well as during the day. All graduates, regardless of when they are taught, are considered part of the program.
2. Students can enroll part time or full time during the day or evening.
3. All graduate courses taught by full-time faculty members are part of the normal teaching load. However, approximately 40% of all graduate courses are taught by visiting lecturers or "moonlighters." Thus, although no Regular College faculty members teach graduate courses on an overload basis or for an additional stipend, approximately 40% of the courses are staffed by part-time personnel.

4. Prior to the current academic year, tuition rates were \$18 per credit with no ceiling. Thus, a student was paying \$270 for five, three-credit courses at Lowell versus \$100 for five courses at Boston or Framingham. A new policy has gone into effect (fall semester 1971) whereby full-time students (minimum load—9 credit hours) pay only \$100 per semester. Part-time students are charged \$18 per credit up to a maximum of \$108. (One course [3 credits]—\$54; two courses [6 credits]—\$108; three or more courses—\$100.) Thus, tuition-wise, it is cheaper to take three or more courses than it is to take two courses. However, this is offset by a differential in registration fees for part-time and full-time students. All tuition fees are returned to the General Fund of the State Treasury.
5. The summer term graduate program is also funded as part of the Regular College program. Presently, Lowell is the only college with such a program. Graduate courses at other colleges are conducted through Continuing Studies. Faculty are paid 12.5% of academic year salary per summer course, ranging from \$1,400 to \$2,000 per course. Part-time personnel or visiting lecturers are equated to the professional rank and are paid 12.5% or one-eighth of this salary for courses taught during the summer and academic year.

The Master of Education is awarded for these majors: administration and supervision, reading, and elementary education. In addition, a Master of Music Education degree is offered (see Table 2.27).

From 1962 to 1970, Salem offered a graduate program as part of its Regular College program. The degree Master of Arts in Teaching was awarded. The program had only one major, elementary education. The largest student enrollment during any academic year was 15. Tuition rates, faculty staffing, and its relationship to Continuing Studies were identical to the present policies at Boston and Framingham.

As can be seen in Table 2.25, the Regular College graduate program at Bridgewater is very small. It consists of a limited number of graduate courses offered during the day or in the Regular College program. The program is actually an extension of Continuing Studies since all degrees are awarded through Continuing Studies. If any of these day courses are applicable to a student's program, he may take them. Thus, in a given semester, a student might take one course or enough to qualify as a full-time Regular College graduate student. The tuition rate for graduate day courses is the same as the undergraduate day tuition rate: \$100 per semester for full-time students and \$7 a credit for part-time students up to a maximum of \$100. The tuition rate

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for all courses taken in the evening through Continuing Studies is \$18 per credit. Tuition fees collected for graduate day courses are returned to the General Fund of the state, whereas Continuing Studies tuition fees are turned over to the Continuing Studies Office of the Massachusetts State College System. Graduate courses conducted in the Regular College are taught as part of the instructor's regular teaching assignment, not as an overload or for an additional stipend.

The major difference between the Bridgewater and Boston programs is the extent of course offerings. A limitation of course offerings makes it impossible for students to complete all their course requirements in the Regular College program. For its Regular College graduate course, Bridgewater adheres to the same administrative guidelines (e.g., faculty, tuition, etc.) followed by other colleges conducting "pure" Regular College graduate programs (Boston, Framingham, Lowell).

During the academic year 1971-72, the College of Art implemented a program whereby graduate students can enroll in courses during the day which are funded by the Regular College program. In some respects, it is similar to the limited program offered at Bridgewater:

1. student enrollment is small (15);
2. course offerings are limited;
3. degrees are awarded through Continuing Studies;
4. students can enroll in the day courses on a part-time or full-time basis;
5. courses are taught by faculty of the Regular College, as part of their regular teaching assignment—not as an overload or for an additional stipend.

However, there are two unique features to this program. First the courses are not conducted exclusively for these graduate students; in fact, they are regularly scheduled classes for the undergraduates in the Regular College program. Graduate students are allowed to enroll in these undergraduate courses for graduate credit. A differential in course requirements for graduate students exists (e.g., additional reading and/or papers). The second unique feature concerns tuition rates. Graduate students pay \$18 per credit for all courses, regardless of whether these courses were taken as part of the Regular College program or through Continuing Studies. Tuition fees collected for

courses taken in the Regular College are not returned to the General Fund of the state as is the policy at all other colleges. Instead, the tuition fees are turned over to Continuing Studies Office of the Massachusetts State College System.

In sum, the graduate programs currently offered in the Regular College Programs at Boston, Framingham, and Lowell are completely independent of Continuing Studies Programs. This is not true of the programs at Bridgewater and the College of Art. However, the major difference between the one at Bridgewater and the "pure" Regular College graduate program (e.g., Boston) is the extensiveness of course offerings. In general, Bridgewater follows the same general guidelines for its graduate courses offered in the Regular College program as those colleges offering pure Regular College graduate programs.

Continuing Studies Graduate Curriculum

In 1966, only the Master of Education degree was awarded by most colleges that had Continuing Studies Graduate Programs. For the most part, majors were limited to general education, elementary education, and secondary education. Within these majors, concentration (9-15 hours) in fields such as administration, guidance, and reading were available. Since that time, four new degrees (MA, MAT, MA, and MMEd) have been added. Additionally, approximately 50 different majors are now being offered. An analysis of these majors will be made in the next chapter.

Continuing Studies Graduate Program Enrollments

It was previously reported in this chapter that it was impossible to separate and compare Continuing Studies graduate and undergraduate student enrollments for the fiscal year 1966 and 1971 because in many cases a clear distinction could not be made as to whether students were undergraduates or graduates. However, from the data provided in Tables 2.18-2.20, it was concluded that student enrollments increased by approximately 60% during this 5-year period. Table 2.21 contained total head counts and full-time equivalents for undergraduate Continuing Studies students during the spring 1971. A similar breakdown for graduate students is presented in Table 2.28 (spring 1971). The three largest programs in terms of total head count and full-time equivalents were Boston (2,652/656), Bridgewater (1,635/502) and Salem (1,356/362) respectively. The smallest program was at the College of Art with a head count of 141 and a FTE of 33. Also, the table reveals a System total head count of 10,333, with a derived student FTE of 2,734.

Graduate Degrees Awarded

Increases in the number of graduate degrees awarded at each college are shown in Table 2.29. The data represent the combined Regular College and Continuing Studies Programs. Combined data were necessary since one of the colleges does not award degrees through Continuing Studies, and several others award degrees through Continuing Studies and the Regular College program.

The total System increase was 371 (36%). Two of the colleges had increases of over 100%: Fitchburg, 155%, and North Adams, 103%. The biggest increase in terms of the number of degrees awarded was experienced by Boston (105) and Bridgewater (92). With the exception of Westfield, which had a decrease of 26%, the other five colleges experienced increases ranging from 4% to 155%.

TABLE 2.28**CONTINUING STUDIES PROGRAM**

**Total Head Count and Full-Time Equivalent (FTE)
for the Spring Semester Only^a
Graduate, Spring 1971**

College	Total Head Count	Full-Time Equivalent
	<i>N</i>	<i>N</i>
Boston	2,652	656
Bridgewater	1,635	502
Fitchburg	968	277
Framingham	1,029	206
Lowell	NP ^b	---
North Adams	526	143
Salem	1,356	362
Westfield	910	260
Worcester	1,116	295
College of Art	141	33
Maritime Academy	NP ^b	---
SYSTEM	10,333	2,734

^aSource: Massachusetts State College System, Central Office—Continuing Studies.

^bNP = No Continuing Studies Program.

In Table 2.30, a breakdown of the number of degrees awarded and the source of funding for the fiscal years 1966 and 1971 is reported. Note that of the 428 degrees awarded at Boston in 1971, 84 were awarded to Regular College students. In the fiscal year 1971, Boston awarded more degrees than any other college in both the Regular College and Continuing Studies Program. The second largest number of degrees awarded in 1971 was by Salem (222). The degree program at the College of Art is relatively new, and they have not graduated any students to date.

Clearly, extensive changes have taken place in the Massachusetts State Colleges since the new Board of Trustees was appointed in 1965 and established their goals for the system. In the 5-year period the greatest change

TABLE 2.29
TOTAL MASTER'S DEGREES AWARDED
REGULAR COLLEGE AND CONTINUING STUDIES PROGRAMS
Comparison of the Fiscal Years 1966 and 1971^a

College	Master's Degrees Awarded-1966	Master's Degrees Awarded-1971	Increase over 1966	
	N	N	N	%
Boston	323	428	105	33
Bridgewater	117	209	92	79
Fitchburg	42	107	65	155
Framingham	60	82	22	37
Lowell	C ^b	58	58	—
North Adams	36	73	37	103
Salem	214	222	8	4
Westfield	90	67	-23	-26
Worcester	147	154	7	5
College of Art	C ^b	0 ^d	0	—
Maritime Academy	NGP ^c	NGP ^c	0	0
SYSTEM	1,029	1,400	371	36

^aSources: Massachusetts State College System, Central Office—Academic Affairs; verified by each college.

^bC = Graduate courses offered through Continuing Studies, but no graduate degree program.

^cNGP = No Graduate Program.

^dBegan awarding graduate degrees after 1966.

has been in the initiation of new and diversified curriculum programs to meet the developing social and economic needs of the Commonwealth. No attempt has been made in this study to provide comparative data on the capital building program. However, it was obvious to the investigators from the campus visits that an extensive capital building program has taken place during this time. This has required considerable effort to obtain greater fiscal support and obviously has been quite successful. An improved faculty salary schedule has been developed and average salaries in the Regular Programs of the college have been raised appreciably in this period. However, salaries for Continuing Studies Programs, the backbone of the graduate program of the colleges, have not been increased and this represents a serious problem.

TABLE 2.30
MASTER'S DEGREES AWARDED
Breakdown of the Number of Degrees Awarded
and the Source of Funding^a
Fiscal Years 1966 and 1971

College	Regular Program		Continuing Studies		Total	
	1966	1971	1966	1971	1966	1971
Boston	57	84	266	344	323	428
Bridgewater		0	117	209	117	209
Fitchburg			42	107	42	107
Framingham		22	60	60	60	82
Lowell		58	C ^b		---	58
North Adams			36	73	36	73
Salem	6	D ^c	208	222	214	222
Westfield			90	67	90	67
Worcester			147	154	147	154
College of Art		NI ^e	C ^b	0 ^f	---	0
Mass. Maritime	NGP ^d	---	NGP ^d	---	---	---
SYSTEM	63	164	966	1,236	1,029	1,400

^aSources: Data were supplied by each college.

^bC = Graduate courses offered through Continuing Studies, but no graduate degree program.

^cD = Discontinued the program at the end of the academic year 1969-70.

^dNGP = No Graduate Program.

^eNI = Not implemented until the academic year 1971-72.

^fBegan offering degrees after 1966.

Increases in overall appropriations per student have risen appreciably during the 5-year period, much of it for additional faculty positions and increased faculty salaries in the Regular Program. There has been some increase in library holdings. However, this is an area where major additional improvement is needed, particularly if they are to be adequate for the extensive development in graduate programs. An analysis of "backup staff" for the instructional and administrative programs, likewise, has not been conducted as a part of this study. Again, the investigators' visits to the campuses have given them the definite impression that the increase in backup staff has not been commensurate with the growth in faculty, administration, and expanded curriculum offerings. This is particularly true in the Continuing Studies area and is quite critical because most of the graduate degrees are provided through the Continuing Studies Program.

The developments within the 5-years from 1966-71 have been striking in a number of areas and appreciable in others. At the same time areas with lower priorities have not grown accordingly. This is particularly true of graduate programs and faculty salaries, faculty loads, and backup staffing in the Continuing Studies area. The new Board of Trustees started from a limited base in 1966 and has provided major improvements in a number of areas in the Massachusetts State Colleges. Much more remains to be done but a very significant start has been made.

Chapter 3

CURRENT STATUS OF CONTINUING STUDIES IN THE MASSACHUSETTS STATE COLLEGE SYSTEM

Introduction

In 1915, the Massachusetts State Department of Education established a Division of University Extension. This program provided classroom and correspondence instruction for adults, 20 years of age or over. Without setting up any state-operated school, the Division of University Extension offered collegiate level classes throughout the state. Credit was awarded for successful completion of courses, but no degree was associated with the program.¹

The Massachusetts State Colleges Continuing Studies Program was implemented in 1954 with the passage of House Bill 2750, which read in part, "For extension courses in the methods used in the art of teaching and related subjects, to be conducted by the Division of Teacher's Colleges. . . ."² The University Extension Program continued to offer collegiate level courses, apart from campus offerings or degree-granting institutions until 1968. At that time, public institutions of higher education absorbed all collegiate level work.³ The mandate for the Massachusetts State Colleges to provide Continuing Education Programs and to award the Master's Degree is contained in Chapter 74, Section 1 of the General Laws of Massachusetts. This law, sometimes referred to as the Willis-Harrington Act, reads in part:

¹Joseph R. Palladino, *Overview, Background and Programs in Continuing Studies*. Paper read at Special Conference on Continuing Studies Programs of the Massachusetts State College System, Boston, Massachusetts, February 5, 1972, p. 4.

²John F. Nash, *An Issue of Finance*. Special Conference on Continuing Studies of the Massachusetts State College System, Boston, Massachusetts, February 5, 1972, p. 1.

³Palladino, loc. cit.

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Section 1. *Management of state colleges. Degrees, powers, Massachusetts Maritime Academy (Last am. 1965, 572, 18).* The state colleges shall provide educational programs, research, extension, and continuing educational services in the liberal, fine and applied arts and sciences and other related disciplines through the master's degree level. They may offer doctoral programs in cooperation with the University of Massachusetts under authority granted by the Board of higher education, concurred in by the board of trustees of said university and of said state colleges. They shall provide a major emphasis on the preparation of teachers and other professional educational personnel⁴

The Massachusetts State College System conducts two types of programs: (1) Regular or Budgeted College Programs and (2) Continuing Studies Programs. Regular or Budgeted College Programs, both undergraduate and graduate, are fully funded by the state. Continuing Studies Programs, both undergraduate and graduate, are self-supporting type programs and receive no funds from the state.

The State College Program of Continuing Studies provides coursework at the undergraduate and graduate levels. Continuing Studies courses are offered: (1) evenings and Saturdays during the academic year, (2) days and evenings during the summer session, and (3) in intersession programs. For the most part, students enroll on a part-time basis. However, some students do enroll as full-time Continuing Studies students, usually because it is impossible for them to attend school during the day (e.g., housewife; program not offered at any other time).

Continuing Education, as defined by the United States Department of Health, Education, and Welfare, includes

activities designed to meet the needs of people beyond compulsory school age whose major occupation is not that of full-time student. They enroll for a variety of reasons (civic, cultural, professional, occupational, social, etc.) in educational activities normally administered through channels other than those designed for part-time or full-time regular day degree program students. However, the work they take may be creditable toward a degree, although such students may not be taking work through the regular degree channels.⁵

⁴*General Laws Relating to Education*, Department of Education, Commonwealth of Massachusetts, 182 Tremont Street, Boston, Massachusetts 02111, 1966, p. 150.

⁵"Definition of Continuing Studies," Higher Education General Information Survey, Department of Health, Education, and Welfare, O.E. Form 2300-8, 1971, p. 1.

According to this definition, Continuing Education courses are offered on a noncredit or credit basis, or stated another way, courses are offered either as a service to the community or for degree credit. Course duration varies from the stereotyped semester course to workshops, institutes, and seminars ranging in length from 1 day to several weeks. In contrast, most of the Continuing Studies Programs of the Massachusetts State Colleges are highly structured, degree-oriented programs, with minimal emphasis placed on "community service" type courses. In their present structure, the programs are really an extension of the Regular College Program, that is, the primary goal or objective is to provide an opportunity for those students who cannot attend school during the day hours, to earn their degrees in the evening. Technically speaking, this is not true, as all day programs are not Regular College Programs and all evening programs are not Continuing Studies Programs. Boston and Fitchburg conduct undergraduate evening colleges as part of their Regular College Programs, and the evening graduate program at Lowell is part of its Regular College Program. On the other hand, the day graduate program at the College of Art is part of its Continuing Studies Program.

As stated previously, the Continuing Studies Programs of the Massachusetts State Colleges are degree oriented, with minimal emphasis on "community service" type courses. The Regular College Programs and the degree-oriented part of the Continuing Studies Programs are quite similar from a curricula standpoint. However, these two programs differ greatly in their method of financing, administrative organization, staffing, and student services. The remainder of this chapter will be devoted to an analysis of the current status of degree-oriented Continuing Studies Programs in the Massachusetts State College System.

Table 3.1 is used to illustrate which colleges currently operate Continuing Studies Programs. Lowell and the Maritime Academy do not conduct either undergraduate or graduate Continuing Studies Programs. The remaining nine colleges offer courses and degrees at the graduate level. Three of the colleges (Fitchburg, Framingham, and the College of Art) conduct undergraduate Continuing Studies courses but do not award degrees. The programs at Fitchburg and Framingham are extensive as only Boston and Salem have larger undergraduate Continuing Studies student enrollments (Table 3.5). However, all undergraduate degrees at Fitchburg and Framingham are awarded by the Regular College. Thus, except for the administrative approach to degree granting, the undergraduate Continuing Studies Programs at Fitchburg and Framingham are similar to those at the six colleges which

TABLE 3.1
CONTINUING STUDIES PROGRAM

Current Courses/Degrees Offered at the Undergraduate and Graduate Levels^a

College	Undergraduate			Graduate		
	No. Courses or Degrees 1971-72	Courses Only 1971-72	Courses & Degrees 1971-72	No. Courses or Degrees 1971-72	Courses Only 1971-72	Courses & Degrees 1971-72
Boston			X			X
Bridgewater			X			X
Fitchburg		X				X
Framingham		X				X
Lowell	X			X		X
North Adams			X			X
Salem			X			X
Westfield			X			X
Worcester			X			X
College of Art		X				X
Maritime Academy	X			X		X

^aSource: Massachusetts State College System, Central Office—Continuing Studies.

award degrees through their Continuing Studies Programs (Boston, Bridgewater, North Adams, Salem, Westfield, Worcester). The case of the College of Art is quite different. Undergraduate courses are offered, but on a very limited basis. It is impossible for students to complete the course requirements of any Regular College Program major in its Continuing Studies Program. The program could be classified as a service-type program since courses are not degree oriented. Simply stated, the College of Art offers undergraduate designated courses in its Continuing Studies Program.

Undergraduate Curriculum

Table 3.2 reveals, for each college, those majors for which all of the course requirements can be met in their Continuing Studies Program. A total of 19 majors is offered. The most diversified curricula offerings are at Bridgewater and North Adams. At Bridgewater, it is possible to complete the requirements of almost every major offered in the Regular College Program, through Continuing Studies. Technically, the list for each college is accurate; however, it underestimates the scope of the undergraduate Continuing Studies Program. For example, although no majors are recorded for Framingham in Table 3.2, its undergraduate Continuing Studies Program enrollment is quite large compared to the other colleges (Table 3.5). In fact, the Director of Continuing Studies at Framingham indicated that approximately 90% of the course requirements for most of its Regular College Program majors can be met in its Continuing Studies Program. This is also true at several other colleges. Thus, the undergraduate Continuing Studies curriculum offerings are much more extensive than what is reflected in Table 3.2.

Of the 19 undergraduate majors listed in Table 3.2, all but Vocational Education are also offered as majors in the Regular College Program. Fitchburg and Westfield are the only colleges that offer the Vocational Education major, and at both colleges it is limited to the evening Continuing Studies Program.

Graduate Curriculum

In 1966, only the Master of Education Degree was awarded by most colleges that had Continuing Studies Graduate Programs. For the most part, majors were limited to: (1) General Education, (2) Elementary Education, and (3) Secondary Education. Within majors, concentrations (9-15 hours) in fields such as Administration, Guidance, and Reading were available. Since that

TABLE 3.2
CONTINUING STUDIES
Undergraduate Majors for Which All Course Requirements Can Be Met in Continuing Studies—February 1972^a

Majors	Boston	Bridgewater	Fitchburg	Framingham	Lowell ^b	No. Adams	Salem	Westfield	Worcester	Mass. Art	Mass. M ^b
Anthropology		BA									
Biology		BA									
Business Administration					BS	BS	BS				
Chemistry		BA			BS						
Earth Science		BA									
Education (Elem.)	BS(Ed)	BS(Ed)			BS(Ed)	BS(Ed)	BS(Ed)	BS(Ed)	BS(Ed)		
Education (Phys. Ed.-W)	BS(Ed)										
Education (Sec.)											
Education (Special)	BS(Ed)										
Education (Vocational)			BS(Ed)					BS(Ed)			
English		BA				BA		BA			
French		BA									
Geography		BA									
History		BA				BA		BA			
Mathematics		BA				BA					
Physics		BA				BS					
Psychology		BA									
Sociology		BA									
Speech/Theatre		BA									

^aSource: Massachusetts State College System, Central Office—Academic Affairs; verified by each college.

^bNeither institution offers a Continuing Studies Program.

time, four new degrees (MA, MAT, MS, and MEd) have been added. Currently, 47 different majors are being offered by the 9 colleges conducting Continuing Studies Graduate Programs (Table 3.3). With the exception of the College of Art, the curricula offerings at the other colleges are quite diversified.

Of the five degrees currently awarded, the MEd is by far the most popular. However, an investigation of the course requirements for the MEd degree in content areas (e.g., History) revealed that, in general, 70% of the courses were in the content field rather than in Education.

Continuing Studies Enrollments

An initial impression of the Massachusetts State College system would be that all: (1) graduate programs are part of Continuing Studies Programs, and (2) undergraduate evening programs are part of Continuing Studies Programs. However, it was illustrated in Chapter 2 that neither of these statements is true. Currently, five colleges conduct graduate programs that are funded as part of the Regular College Program, and two colleges have undergraduate evening colleges which are part of their Regular College Program. Thus, a breakdown of current Regular College Program student enrollments is essential before any analysis of student enrollments in Continuing Studies Programs can be made.

Table 3.4 contains a student enrollment breakdown for the Regular College Program at each college for the fall semester, 1971-72. Total head counts and full-time equivalents (FTE) are reported separately for both undergraduate and graduate students. The Raytheon Program at Fitchburg State College is in a state of "limbo." It is fully funded by Raytheon and thus independent of Continuing Studies. Yet, since it is not funded by the state, enrollments should not be mixed in with enrollments of the state-funded Regular College Program. For purposes of this report, they were included as part of the Regular College Program since

1. the curriculum (Industrial Science) is the same as that offered in the evening Regular College Program—and is not offered in Continuing Studies;
2. the program is under the Director of the evening college, not the Director of Continuing Studies;
3. it is financially independent of Continuing Studies.

TABLE 3.3

CONTINUING STUDIES PROGRAM

Graduate Majors in Existence—February 1972^a

Majors	Boston	Bridgewater	Fitchburg	Framingham	Lowell ^b	No. Adams	Salem	Westfield	Worcester	Mass. Art	Mass. M. ^b
Administration	MEd	MEd	MEd			MEd	MEd				
Administration (Elem.)				MA				MEd	MEd		
Administration (Sec.)				MA				MEd	MEd		
Administration (Occupations)								MEd			
Art Education											MS
Behavioral Sciences											
Biology						MEd			MEd		
Biology (Sec.)		MA/MEd			MEd						
Chemistry											
Creative Arts		MA/MEd					MAT				
Early Childhood		MEd									
Earth Science							MEd	MEd			
Elementary Education	MEd	MEd		MEd		MEd	MEd		MEd		
Elementary Curriculum				MEd							
English	MEd	MA/MEd	MAT/MEd	MEd		MEd	MAT	MEd	MEd		
Food and Nutrition					MS						
Geography			MEd								
Guidance & Counseling	MEd	MEd	MEd			MEd	MEd	MEd	MEd		
Guidance & Counseling (Elem.)					MA						
Guidance & Counseling (Sec.)					MA						
Health Education											

CURRENT STATUS OF CONTINUING STUDIES

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History	MEd	MA/MEd	MEd	MA/MAT	MEd	MEd
Home Economics						
Humanities		MEd				
Industrial Education			MEd			
Instructional Media		MEd				MEd
Language Arts (Elem.)						
Learning Disabilities		MEd				
Librarianship-School		MEd				
Library Science						MEd
Mathematics		MEd		MEd	MS/MAT	MEd
Mathematics (Elem.)		MEd		MEd		
Modern Foreign Languages		MEd				MEd
Physical Education (W.)		MS				
Physical Sciences		MEd				MEd
Physics		MEd		MEd		
Psychology-School			MEd			MEd
Reading		MEd	MEd		MEd	MEd
Reading & Language Arts						
Science Education			MEd			
Science (Elem.)				MEd		
Secondary Education	MEd			MEd		MEd
Social Sciences		MEd				
Social Sciences (Elem.)					MEd	
Social Studies					MEd	
Special Education	MEd	MEd	MEd			MEd
Speech & Theatre		MEd				

^aSource: Massachusetts State College System, Central Office—Academic Affairs; verified by each college.

^bNeither institution offers a Continuing Studies Program.

TABLE 3.4
REGULAR COLLEGE PROGRAM
Breakdown of Current Student Enrollments—Fall 1971-72^a

College	Undergraduate Student				Enrollments			Graduate Enrollment		
	Head Count Day	FTE Day	Head Count Evening Coll.	FTE Evening Coll.	Head Count Raytheon	FTE Raytheon	Head Count Total	FTE Total	Head Count Total	FTE Total
Boston	4,676	4,667	738	738			5,414	5,405	125	125
Bridgewater	3,502	3,497					3,502	3,497	12	8
Fitchburg	2,622	2,622	545	175	463	194	3,630	2,991		
Framingham	2,541	2,495					2,541	2,495	31	31
Lowell	1,846	1,823					1,846	1,823	546	188
North Adams	1,519	1,483					1,519	1,483		
Salem	4,658	4,631					4,658	4,631		
Westfield	2,247	2,247					2,247	2,247		
Worcester	2,840	2,784					2,840	2,784		
College of Art	931	931					931	931	15	15
Maritime Academy	287	287					287	287		
SYSTEM	27,669	27,467	1,283	913	463	194	29,415	28,574	729	367

^aSource: HEGIS reports submitted by each college to the Massachusetts Board of Higher Education in November 1971.

In terms of undergraduate total head counts and full-time equivalents, Boston (5,414/5,405) and Salem (4,658/4,631) were the biggest, and the two smallest were the Maritime Academy (287/287) and the College of Art (931/931). The total evening college (including Raytheon) head count and full-time equivalents were 1,746 and 1,107, respectively. A System undergraduate head count of 29,415 and full-time equivalent of 28,574 is also reported. In addition, the Regular College Program included a total of 729 graduate students, reflecting a full-time equivalent graduate student enrollment of 367. In sum, the Regular College Program (fall 1971-72) had a combined undergraduate and graduate System total head count of 30,144 ($29,415 + 729 = 30,144$) and a System full-time equivalent of 28,941 ($28,574 + 367 = 28,941$).

Undergraduate and graduate student enrollments in Continuing Studies for the fall semester 1971-72 are revealed in Table 3.5. At the undergraduate level, the two biggest programs, in terms of head counts and FTEs, were at Bridgewater (1,610/509) and Salem (1,188/487); the two smallest were at Worcester (69/18) and the College of Art (125/25). The undergraduate System head count was 5,663 with a corresponding full-time equivalent of 1,831. Note that only 1,688 students (30%) were matriculated. The major reasons put forth by the Directors of Continuing Studies were that some of the students were

1. taking courses for the first time and had not officially matriculated yet;
2. matriculated Regular College students who were taking these courses for a variety of reasons;
3. graduate students taking undergraduate prerequisite courses;
4. college graduates taking these undergraduate courses for teacher certification;
5. taking these undergraduate courses for a variety of reasons such as interest or cultural enrichment.

It should be pointed out that the undergraduate enrollment figures at Boston and Fitchburg are deceiving. Both of these colleges also operate undergraduate evening colleges as part of their Regular College Program (see Table 3.4). Both programs operate in the evening and thus in a sense are competing with one another. The combined undergraduate Regular College and Continuing Studies head count and FTE for Fitchburg are 1,519/530, and for Boston they are 1,158/884.

TABLE 3.5
CONTINUING STUDIES PROGRAM
Current Total Head Count, Number of Matriculated Students,
Full-Time Equivalent (FTE) of Total Head Count
Academic Year 1971-72 (Fall Semester)^a

College	Undergraduate Program			Graduate Program		
	Head Count	Matriculated	FTE ^b	Head Count	Matriculated	FTE ^c
Boston	420	87	146	2,390	2,021	1,016
Bridgewater	1,610	449	509	1,777	950	682
Fitchburg	511	449	161	813	471	186
Framingham	954	92	281	903	277	264
Lowell	NP ^d	--	--	NP ^d	--	--
North Adams	308	124	108	456	160	154
Salem	1,188	347	487	1,372	451	530
Westfield	478	140	96	932	280	233
Worcester	69	0	18	1,010	215	334
College of Art	125	0	25	156	40	39
Maritime Academy	NP ^d	--	--	NP ^d	--	--
SYSTEM	5,663	1,688	1,831	9,809	4,865	3,438

^aSource: HEGIS reports submitted by each college to the Massachusetts Board of Higher Education in November 1971.

^bUndergraduate full time = 15 hours.

^cGraduate full time = 12 hours.

^dNP = No Continuing Studies Program.

Continuing Studies graduate enrollments are also reported in Table 3.5. During the fall semester, 1971-72, a total of 9,809 students (FTE = 3,438) enrolled in graduate courses at the nine colleges conducting Continuing Studies Programs at the graduate level. Graduate programs enrolled approximately 70% more students than the undergraduate programs.

By far, the largest graduate programs were conducted at Boston (FTE = 1,016) with the two smallest programs at the College of Art (FTE = 39) and North Adams (FTE = 154). Only 4,865 (49%) of the 9,809 students were officially matriculated. This large nonmatriculated number (4,944) was accounted for in a variety of ways by the Deans of Graduate Studies: (1) first semester students, (2) to meet teacher certification requirements, (3) interest areas and cultural enrichment, and (4) increment incentive policy established by their local School Committee (e.g., 30 credit hours beyond the Master's Degree = \$500 increment raise).

A comparison of student enrollments of the Regular College and Continuing Studies Programs is reported in Table 3.6. Combined graduate and undergraduate data are reported for both head count and full-time equivalent figures. For example, in Table 3.4, the total Regular College undergraduate

TABLE 3.6
REGULAR COLLEGE VERSUS CONTINUING STUDIES
Comparison of System Combined Graduate and
Undergraduate Total Head Counts and Full-Time Equivalents (FTE)
Fall Semester 1971-72

System Totals Regular College		System Totals Continuing Studies		System Totals Percent Continuing Studies Is of Regular College	
Head Count ^a	FTE ^b	Head Count ^c	FTE ^d	Head Count	FTE
N	N	N	N	%	%
30,144	28,941	15,472	5,269	51	18

^aFrom Table 3.1 (29,415 + 729 = 30,144)

^bFrom Table 3.1 (28,574 + 367 = 28,941)

^cFrom Table 3.2 (5,663 + 9,809 = 15,472)

^dFrom Table 3.2 (1,831 + 3,438 = 5,269)

head count was 29,415 and for graduate students it was 729. Thus, in Table 3.6 the total System Regular College head count is 30,144 ($29,415 + 729 = 30,144$). During the fall semester 1971-72, 15,472 students were enrolled in Continuing Studies Program courses, whereas 30,144 students were enrolled in Regular College Program courses. The Continuing Studies head count was approximately one-half (51%) that of the Regular College Program. In terms of FTEs, Continuing Studies (5,269) was about one-fifth (18%) as large as the Regular College Program (28,941).

Of particular importance is the fact that Continuing Studies Programs, essentially a part-time program, enrolled 51% as many students as the Regular College Program during the fall semester, 1971-72. From the data presented in Tables 3.5 and 3.6, it can be concluded that there is an interest and a need for Continuing Higher Education other than that which is offered during the prime hours of the day (8:00 a.m.-4:00 p.m.).

Financial Structure of Continuing Studies Program

Spending Limit Authorization

Continuing Studies originated in 1954 with House Bill 2750 which read in part:

For extension courses in the methods used in the art of teaching and related subjects, to be conducted by the division of Teacher's Colleges—provided that such courses may be provided free of charge to veterans—and further provided that the Division may in addition to the sum of \$20,000 appropriated for the purpose in this item, receive and expend without appropriation, income derived from such courses as may be conducted at no expense to the Commonwealth, to an amount not exceeding \$50,000

Thus, the financial tone of Continuing Studies was set. The Division of State Colleges received an initial appropriation of \$20,000 to implement its Continuing Studies Program, with the condition that it be conducted at no expense to the Commonwealth. Further, this legislation set a spending limit of \$50,000. The Division was granted the authority to conduct courses, establish fees (tuition, registration, etc.), and to collect all fees pertaining to these courses. The fees were to be used to pay all operating expenses (salaries, services, materials, etc.) with the stipulation that these expenses could not exceed \$50,000 during the initial fiscal year. Surplus income (over \$50,000) was to be reverted to the General Fund of the State Treasury at the end of the fiscal year.

The Continuing Studies Program spending limit has been increased by the legislature almost on an annual basis. It can be seen in Table 3.7 that the

TABLE 3.7
 CONTINUING STUDIES PROGRAM
 Authorized Spending Limits for the Fiscal Years 1965-72^a

Fiscal Year	Authorized Spending Limit
1964-1965	\$1,000,000
1965-1966	1,500,000
1966-1967	1,500,000
1967-1968	1,700,000
1968-1969	2,000,000
1969-1970	2,500,000
1970-1971	2,740,000
1971-1972	3,000,000

^aSource: Massachusetts State College System, Central Office—Continuing Studies.

spending limit for the fiscal year 1965 was \$1,000,000, and for the current fiscal year (1972) it is \$3,000,000. At this point, clarification of the spending limit concept is in order. Each year the legislature authorizes a new Continuing Studies spending limit, which could be higher, lower, or the same as the previous fiscal year limit. This spending limit is not an appropriation or an advance. It is merely the authorization to expend, up to a certain limit, income derived from Continuing Studies courses during the specified fiscal year. At the beginning of each fiscal year (July) the Continuing Studies Program is without funds, and all expenditures during that fiscal year are made from that fiscal year's receipts. Thus, no funds from the Commonwealth of Massachusetts are used either in the form of an appropriation or an advance. The Continuing Studies Program can be defined as an "expenditure-of-receipts" program. Compounding this problem is the fact that the legislature usually does not pass this authorization until well into the fiscal year. For example, the 1972 fiscal year spending limit was not approved until October 1971. At this point, the summer session was over, the fall semester had started, and plans for the final semester (spring) were well underway before the System Continuing Studies Office and individual State Colleges knew what their spending limits were for the 1972 fiscal year. Thus, it was not until almost all planning for the current fiscal year had been finalized that administrators knew how they should have planned. *This is truly an administrative nightmare!*

Continuing Studies Programs are conducted at all of the State Colleges except Lowell and the Maritime Academy. The spending limit authorization for the nine colleges' operating programs is set by the Board of Trustees. The spending limit formula has varied considerably over the years. The current formula is based on the receipts from the previous fiscal year. In order to understand the derivation of the spending limit set for each college for fiscal 1972, an understanding of each college's Continuing Studies income for the fiscal year 1971 is essential.

The Continuing Studies spending limit of \$2,740,000 for the fiscal year 1971 was authorized under the Acts of 1970-Chapter 480, which read:

For the program of continuing studies and summer schools to be conducted by the board of trustees of state colleges, for graduates of state colleges or for such students or graduates of other colleges as may be approved by said board of trustees; provided, that such courses may be furnished free of charge to veterans, as authorized in sections seven and seven A of chapter sixty-nine of the General Laws; and, provided further, that said board of trustees may expend from the receipts, without appropriation, income derived from such courses as may be conducted at no net expenses to the Commonwealth to an amount not exceeding two million seven hundred and forty thousand dollars with the approval of said trustees.

A breakdown of receipts or income for fiscal 1971, by college and semester, is reported in Table 3.8. (Hyannis is a branch of Bridgewater which only

TABLE 3.8
CONTINUING STUDIES PROGRAM
Breakdown of Income by Semesters—Fiscal Year 1971^a

College	Summer 1970	Fall 1970	Spring 1971	Fiscal Total
Boston	\$149,897.10	\$221,004.04	\$212,580.60	\$583,481.74
Bridgewater	146,170.70	219,816.25	232,587.10	598,574.05
Hyannis	19,312.60	—	—	19,312.60
Fitchburg	49,552.00	49,246.00	49,617.80	148,415.80
Framingham	100,799.82	107,442.20	104,485.20	312,727.22
North Adams	53,411.10	62,729.20	68,367.40	184,507.70
Salem	157,701.60	171,094.20	177,896.60	506,602.40
Westfield	79,993.40	89,975.40	86,930.00	256,898.80
Worcester	64,220.95	70,037.90	70,408.40	204,667.25
College of Art	9,345.00	15,812.20	19,757.00	44,914.20
SYSTEM	\$830,404.27	\$1,007,157.39	\$1,022,540.10	\$2,860,101.76

^aSource: Massachusetts State College System, Central Office—Continuing Studies.

operates during the summer session.) The total System income for the fiscal year 1971 was \$2,860,101.76. In terms of income, the three largest programs were at Bridgewater, Boston, and Salem, with the smallest at the College of Art (excluding Hyannis).

Total System income and expenditures for fiscal 1971 are revealed in Table 3.9. Note that no income is reported for Administration or Special Projects. Administration expenditures were for salaries and expenses connected with Continuing Studies within the Central Office of the Massachusetts State Colleges. Special Projects is a fund reserved for the Board of Trustees. A list of some of the Special Projects for the fiscal year 1970 is contained in Table 3.11.

A composite statement of income and expenditures for the fiscal year 1971 is reported in Table 3.10. The total income was \$2,860,101.76 with total expenditures amounting to \$2,725,961.08. Thus, \$134,140.68 was reverted to the General Fund of the State Treasury (\$2,860,101.76 — \$2,725,961.08). Since the spending limit set by the legislature was \$2,740,000.00, an average of \$14,038.92 was reverted to the General Fund. Of the total System expenditure (\$2,725,961.08), 88% was for salaries or services (Table 3.12).

TABLE 3.9
CONTINUING STUDIES PROGRAM
Income and Expenditures—Fiscal Year 1971^a

College	Income	Total Expenditures
Boston	\$ 583,481.74	\$ 492,268.68
Bridgewater	598,574.05	507,029.96
Fitchburg	148,415.80	120,774.87
Frammingham	312,727.22	249,124.93
Hyannis (Summer Branch of Bridgewater)	19,312.60	16,319.24
North Adams	184,507.70	166,507.32
Salem	506,602.40	481,585.81
Westfield	256,898.80	244,741.55
Worcester	204,667.25	167,832.80
College of Art	44,914.20	47,383.48
Administration		87,417.81
Special Projects		114,974.63
TOTALS	\$2,860,101.76	\$2,725,961.08

^aSource: Massachusetts State College System, Central Office—Continuing Studies.

TABLE 3.10
CONTINUING STUDIES PROGRAM
Statement of Income and Expenditures^a
Fiscal Year 1971

Category	Amount
Total Income	\$2,860,101.76
Total Expenditures	2,725,961.08
Spending Limit Set by Legislature	2,740,000.00
Balance Reverted to General Fund of State Treasury	134,140.68
Overage Reverted to General Fund of State Treasury	14,038.92

^aSource: Massachusetts State College System, Central Office—Continuing Studies.

TABLE 3.11
CONTINUING STUDIES PROGRAM
Special Projects Fund^a
List of the Budgeted Special Projects Approved by
the Board of Trustees for the Fiscal Year 1970

Description		Amount
Worcester	Disadvantaged Freshmen	\$1,680
Banner Publishing, Roxbury	Full Page Ad, Boston Area State Colleges	588
Salem	Drug Workshop	1,610
Audio Visual Office 182 Tremont Street	Films	1,300
Fitchburg and Westfield	Industrial Arts Program	12,000
Various Colleges	Adult Basic Education and Adult Civic Education	6,000
Salem	Health Study	3,500
Fitchburg	Foreign Language Conference	200
Bridgewater	English Teaching Conference	100
Salem	Marking Study	2,000
College of Art	Second Art Council	1,500
Fitchburg	Administrative Workshop	460
		\$30,938

^aSource: Report of the Continuing Studies Program Study Committee—Subcommittee of the Directors of Continuing Studies, June 1970.

TABLE 3.12
CONTINUING STUDIES PROGRAM

Breakdown of Expenditures
Fiscal Year 1971^a

Expenditures Total	Expenditures Salaries/Services (Accounts 02-03)	Expenditures All Others (Accounts 10-16)
\$2,725,961.08	\$2,396,636.25 (88%)	\$329,234.83 (12%)

^aSource: Massachusetts State College System, Central Office—Continuing Studies.

During the spring semester (fiscal 1971) administrators were planning the summer and fall (fiscal 1972) semesters. Unfortunately, they did not know what their spending limit was going to be because the legislature had not acted on the total spending limit authorization for the State College System. Thus, an estimating spending limit formula had to be developed. The current formula for estimating the spending limit is as follows:

1. 90% of each college's previous fiscal year income will serve as its initial or estimated budget for the following year.
2. 3% of the anticipated total System income will be reserved for salaries and expenses connected with Continuing Studies within the Central Office of the Massachusetts State Colleges.
3. 3% of the anticipated total System income will be reserved for the "Special Projects" fund controlled by the Board of Trustees.
4. 4% of the anticipated total System income will be reserved as a "Bail-out Fund" for those colleges whose program is not self-supporting.

At the end of the fiscal year, monies not used in the "Special Projects Fund" and the "Bail-out Fund" will be reverted to the colleges on a formula basis.

The estimation formula (90%-3%-3%-4%) is illustrated in Table 3.13: (1) Column II reveals the 1971 fiscal year income for each college, (2) Column

90 NEW DIMENSIONS OF CONTINUING STUDIES

III reveals the initial estimated spending limit or budget for each college for fiscal 1972 (based on 90% of Column II), and (3) Column IV reveals the adjusted spending limit for each college after the legislature authorized the \$3,000,000 System spending limit for fiscal 1972 in October 1971. At the bottom of Table 3.13, a breakdown of the adjusted 1972 budget is listed,

TABLE 3.13
CONTINUING STUDIES PROGRAM
Estimation of Spending Limits—Fiscal 1972

I	II	III	IV
College	Income 1971	Initial 1972 Spending Limit of Budget—90% of 1971 Income	Adjusted 1972 Spending Limit or Budget
Boston	\$ 583,481.74	\$ 525,134	\$ 567,000
Bridgewater	598,574.05	538,717	567,000
Hyannis	19,312.60	17,381	
Fitchburg	143,415.80	133,574	135,000
Framingham	312,727.22	281,455	297,000
North Adams	184,507.70	166,057	162,000
Salem	506,602.40	455,942	486,000
Westfield	256,898.80	231,209	243,000
Worcester	204,667.25	184,201	189,000
College of Art	44,914.20	40,423	54,000
COLLEGE TOTAL	\$2,860,101.76	\$2,574,093	\$2,700,000
LEGISLATIVE SPENDING LIMIT <i>(Fiscal 1972)</i>			\$3,000,000
College Total		\$2,700,000	
<i>(90% of Spending Limit)</i>			
Administration—Central Office		90,000	
Continuing Studies Expenses			
<i>(3% of Spending Limit)</i>			
Special Projects		90,000	
<i>(3% of Spending Limit)</i>			
Bail-Out Fund		120,000	
<i>(4% of Spending Limit)</i>			

based on the 90-3-3-4 (%) method. During the spring semester (1972), income for the fiscal year 1972 will begin to crystallize. The adjusted budgets for the four areas (Colleges, Central Office, Special Projects Fund, and Bail-out Fund) will be adjusted again to insure that

1. total System expenditures will not exceed the spending limit of \$3,000,000;
2. total System expenditures will not exceed the total System income or receipts;
3. as little as possible of the total System income will be reverted to the General Fund of the State Treasury (an overage of \$14,038.92 was reverted for the fiscal year 1971—Table 3.10).

The current mode of financing and administering Continuing Studies puts undue restrictions on the program. Some of the major problems are:

1. the spending limit restriction curtails expansion or stifles growth;
2. the spending limit restriction does not allow good financial management to be rewarded since all surplus funds must be reverted to the State Treasury;
3. all unexpended funds must be reverted to the State Treasury at the end of the fiscal year;
4. planning of any type is virtually impossible because: (a) funds are not available; and (b) two-thirds of the year is over, in terms of planning, before administrators have any idea of what their operational budgets are for the year.

In the future, any self-support program, whether temporary or permanent, should not operate under the current administrative and financial structure of Continuing Studies. Funding should be accomplished by means of a trust fund similar to the Continuing Education Program of the University of Massachusetts and the Massachusetts Community Colleges. A trust fund operation would eliminate some of the current financial problems since: (1) there would be no spending limit, and (2) unexpended funds could be carried from one fiscal year to another. With these restrictions eliminated, administrators would finally be provided with time and funds for: (1) short-term and long-range planning and (2) developing experimental programs.

Student Fees

Tuition and fee charges are set by the Board of Trustees. The original (1955) tuition fee of \$9.00 per credit was increased in 1963 to \$18.00 per credit for in-state students and \$25.00 per credit for out-of-state students. These 1963 rates are still in effect (Table 3.14). Other current fees are as follows: (1) audit = \$11.00 per credit; (2) registration = \$10.00 per semester; (3) late registration = \$2.00 per semester; (4) change of course = \$2.00 per course; (5) library = \$5.00 per semester; (6) placement = \$5.00 payable in the semester of a student's graduation; (7) lab fees = varies depending on the type of lab (e.g., Biology, Language). Library, placement, and lab fees remain at the college; all other fees are reverted to the Continuing Studies Office of the Massachusetts State College System. These fees apply to all courses conducted (academic year, summer session, intersession, etc.).

Over the years, a variety of tuition-free policies has been implemented. In gratitude for services, the legislature passed a law providing up to 120

TABLE 3.14
CONTINUING STUDIES PROGRAM
Current Course Fees^a

Fee	Amount
Tuition (In-State) ^b	\$18.00 per credit
Tuition (Out-of-State) ^b	25.00 per credit
Tuition (Audit) ^b	11.00 per credit
Registration ^b	10.00 per semester
Late Registration ^b	2.00 per semester
Change of Course ^b	2.00 per course
Library ^c	5.00 per semester
Placement ^c	5.00 semester of graduation
Lab Fee ^c	varies

^aSource: Massachusetts State College System, Central Office—Continuing Studies.

^bThese fees are reverted to the Continuing Studies Office of the Massachusetts State College System.

^cThese fees remain at the individual colleges.

semester hours of tuition-free courses (unlimited to disabled) for veterans of World War I, World War II, Korea, and active duty servicemen who are residents of the Commonwealth of Massachusetts and stationed in Massachusetts (Chapter 69—Sections 7 and 7A, amended by Chapter 403—Acts of 1954, further amended by Chapters 409 and 613 of the Acts of 1958; see Appendix I). Under a different law, Vietnam veterans are entitled to 4 years of college (Chapter 4—Section 7 of the General Laws, amended by Chapter 531 of the Acts of 1968).

Currently, tuition-free courses are offered to: (1) qualified veterans of World War I, World War II, Korea and Vietnam; (2) active duty servicemen from Massachusetts who are stationed within the state; (3) nonprofessional State College employees; (4) professional employees from the other segments of public higher education in Massachusetts (excluding State Colleges); and (5) cooperating teachers or supervisors of State College student teachers. Pending legislation would extend tuition-free courses to a variety of other segments of the population such as: (1) handicapped, (2) over age 65, (3) children of state employees, (4) faculty wives, (5) worthy students in need, and (6) children of certain Vietnam veterans.

All Continuing Studies income is derived exclusively from tuition and other related course fees. Thus, all tuition-free enrollments are awarded without any reimbursement to the Continuing Studies Programs. In Table 3.15, a comparison is made of the number of students receiving tuition-free instruction for the fiscal years 1968 and 1971. A total of 6,729 students received free courses in 1968 whereas 8,769 were tuition-exempt in 1971. This represents an increase of 2,040 free enrollments or 30%. The largest category in 1971 was veterans (6,211) but the biggest increases were in the categories of state employees and student teaching vouchers.

The data in Table 3.15 represent the number of students who were tuition-exempt. However, each student averaged 1.5 courses in 1971. Thus, approximately 13,154 ($8,769 \times 1.5 = 13,154$) or 21% of the total course enrollments (61,333) for fiscal 1971 were taken free of charge. Figured at \$54.00 per course (tuition-free students pay all course-related fees), this represented a loss in revenue of approximately \$700,000.

At this point, an examination of the Continuing Studies tuition-free course policies is in order to determine which, if any, are legally binding rather than permissive in nature. In 1915, the Massachusetts State Department of Education established its Division of University Extension. In 1954, the Massachusetts State Colleges implemented its Continuing Studies Program. At

TABLE 3.15
CONTINUING STUDIES PROGRAM
 Number of Students Receiving Tuition-Free Courses^a
 Comparison of the Fiscal Years 1968^b and 1971

Type	1968 ^c	1971 ^c	Increase over 1968	
	<i>All Colleges</i>	<i>All Colleges</i>	<i>N</i>	<i>%</i>
Veterans	5,671	6,211	540	10
Student Teaching Vouchers	1,028	2,435	1,407	137
State Employees	30	123	93	310
SYSTEM	6,729	8,769	2,040	30

^aSource: Massachusetts State College System, Central Office—Continuing Studies.

^bData were not available for the fiscal year 1966.

^cRefers to the number of students taking tuition-free courses. On an average, students took 1.5 courses; thus, in 1971, there were approximately 13,153 tuition-free enrollments.

that time, the State Colleges were a Division of the State Department of Education. However, University Extension and Continuing Studies were completely separate programs. Currently, the Massachusetts State College System has its own Board of Trustees and is no longer under the control of the State Department of Education. Continuing Studies is a program of the Massachusetts State College System. The University Extension Program continues to exist and is still under the State Department of Education.

Since its beginning (1954), the Continuing Studies Program has been providing tuition-free instruction for qualified veterans based on Chapter 69—Sections 7 and 7A. However, concerning Continuing Studies Programs, these laws are permissive rather than binding. Sections 7 and 7A refer to the University Extension Program only. Continuing Studies is not mentioned.

UNIVERSITY EXTENSION COURSES

Section 7. UNIVERSITY EXTENSION AND CORRESPONDENCE COURSES. (Last am. 1958, 613, 2D). The department may co-operate with existing institutions of learning in the establishment and conduct of university extension and correspondence courses; may supervise the administration of all such courses supported in whole or in part by the commonwealth; and also, where deemed advisable, may establish and

conduct such courses for the benefit of residents of the commonwealth and, provided that the fees charged exceed the cost of service, may enroll in correspondence courses such non-residents as are approved by the department. The department may offer correspondence courses, free of charge, to inmates of county and state hospitals and sanatoria, municipal sanatoria and tuberculosis divisions and tuberculosis wards of municipal hospitals, county and state correctional institutions, the Tewksbury hospital, and federal hospitals situated within the commonwealth, and to veterans, as such term is defined in section twenty-one of chapter thirty-one, who come within the class referred to as disabled veterans in section twenty-three of said chapter thirty-one, and may permit university extension courses to be taken, free of charge, by such veterans, and also by blind persons who have resided in the commonwealth at least one year immediately prior to the taking of such courses. The department shall permit such courses to be taken, free of charge, by persons sixty-five years of age or over. The department may also furnish correspondence courses, free of charge, to former inmates of any of said county or state hospitals or sanatoria, municipal sanatoria and tuberculosis divisions and tuberculosis wards of municipal hospitals, for a period of one year immediately following their discharge therefrom; provided, that such courses shall be furnished only for the purpose of completing correspondence courses in which said former inmates had enrolled prior to their discharge. It may, in accordance with rules and regulations established by it, grant to students satisfactorily completing such courses suitable certificates.

Section 7A. VETERANS; FREE UNIVERSITY EXTENSION COURSES, ETC. (1958, 409). In addition to the persons entitled to take university extension courses free of charge under section seven, the following persons shall be entitled to take such courses free of charge for a total period of not more than four years;—

Residents of the commonwealth while serving in the armed forces of the United States and stationed in the commonwealth.

World War I, World War II and Korean veterans, as defined in clause Forty-third of section seven of chapter four, who are residents of the commonwealth. The commonwealth may accept and use such federal funds as may be available for the purposes of this section.

(Amended to include Vietnam—1968)

A comparison of the terminology used in Section 7A and the annual Spending Limit Authorization Bill for Continuing Studies Programs provides further evidence that the laws are binding on the University Extension Program but permissive for the Continuing Studies Program. Section 7A (*Veterans; free University Extension courses*) states in part, "...the following persons *shall* be entitled to take such courses free of charge" Thus, the University Extension Program is required by law to provide tuition-free courses to qualified veterans and certain active duty servicemen. On the other hand, the Continuing Studies Program Spending Limit Authorization Bill, cited previously in this chapter, states in part "...provided, that such courses *may* be furnished free of charge to veterans, as authorized in sections 7 and 7A of Chapter sixty-nine of the General

Laws” Thus, the term “may” makes it a permissive law, not binding on the Continuing Studies Programs of the Massachusetts State Colleges.

In 1954, Continuing Studies and University Extension were both under the jurisdiction of the Board of Education, and apparently the Board elected to provide tuition-free courses to veterans. There are two other interesting points that should be mentioned. First, in addition to veterans, Section 7 includes numerous other categories of people for whom the University Extension Program must provide tuition-free courses, all of whom are excluded from the annual Spending Limit Authorization Bill. Note that this bill specifically states veterans and thus excludes all others. Second, it is probably safe to conclude that the Board of Education was able to foresee the danger of providing free instruction in a self-support program and therefore allowed itself the opportunity of terminating the policy in the future by using the terminology “may” in its annual bill.

Over the years, Section 7 has expanded, so that it now includes qualified veterans (World War I, World War II, Korea, and Vietnam) and certain active duty servicemen. It should be kept in mind that this law refers only to veterans’ benefits as they relate to University Extension. This is in addition to any other (state or federal) educational benefits provided veterans under various “GI Bills.” For example, Korean veterans were provided a monthly subsistence while attending school but were not exempt from tuition.

Still another example, and perhaps the most significant, is that the similar self-supporting Continuing Education Programs of the University of Massachusetts and the Massachusetts Community Colleges do not provide tuition-free education to any veterans. In fact, there are no tuition-free policies in either program. All tuition-free policies are honored only in their state-funded Regular College Programs.

Thus, the current Board of Trustees has inherited a permissive law which has created serious problems not only for Continuing Studies but, in terms of accreditation, for all Regular College Programs at those colleges conducting Continuing Studies Programs. However, since it is a Board of Trustees policy it can be terminated by action of the Board. The number of tuition-free courses has continued to grow annually, and will continue to grow with the return of more and more Vietnam veterans. Despite the obvious repercussions (especially from veterans’ organizations) the Board of Trustees should terminate this policy. In the future, all students in any self-supporting program should be required to pay full tuition unless the state is willing to allocate funds, on an FTE basis, at a rate equivalent to that of Regular

College Program students. (See Appendix I, Parts A and B, for additional information concerning policies for veterans.)

The policy providing a tuition-free course in Continuing Studies to supervisors of Massachusetts State College student teachers was also inherited by the present Board of Trustees. It was implemented on January 21, 1966 (see Appendix I, Part F). At that time, a pilot program, to terminate June 30, 1966, was implemented whereby colleges at which the Continuing Studies Program was not in deficit could provide up to 50 tuition-free vouchers. The voucher had to be used by the teacher who did the actual supervision. Since that time, the policy has changed several times and the number of vouchers has grown at an alarming rate (2,435 in 1970-71). The present policy provides a tuition-free voucher to all supervisors of all State College student teachers, and it can be transferred within the school system if the actual supervisor does not wish to make use of it. It is not transferable to other Massachusetts State Colleges.

As Regular College Program enrollments increase, this policy has the potential of "breaking the bank" of the Continuing Studies Program. The Board should eliminate the policy if state support is not forthcoming.

The University of Massachusetts also issues student-teaching vouchers, but they are only honored by the Regular College Program, not its Continuing Education Program. The problem is simplified at the University because all graduate programs are part of the funded Regular College Program. Since all graduate students are funded on an FTE basis, the University can award these vouchers without any effect on its budget. Likewise, this is true at Lowell. It does not have a Continuing Studies Program and its graduate program is funded by state appropriation. Student-teaching vouchers are honored in its graduate program at no expense to the college.

The present Board of Trustees has implemented two tuition-free policies. In 1967, a policy of free tuition for nonprofessional employees was enacted (see Appendix I, Part C). The second was a reciprocal agreement with the Boards of Trustees of other segments of public higher education. Under this arrangement: (1) faculties of Massachusetts State Colleges can take tuition-free courses in any college in other segments of public higher education; and (2) the Massachusetts State Colleges provide tuition-free courses to faculties of all colleges in other segments of public higher education. However, other segments of higher education do not honor this arrangement in their self-supporting Continuing Education Programs (e.g., University of Massachusetts, Community Colleges), whereas it has been extended to include Continuing Studies Programs of the State Colleges (see Appendix I, Part E).

It was stated previously that the loss in revenue attributed to these tuition-free policies was approximately \$700,000 for fiscal 1971. The term "loss" in revenue may be misleading. Currently, Continuing Studies has a spending limit restriction (fiscal 1971 = \$2,740,000). The fiscal 1971 income, derived from tuition-paying students and course-related fees for all students, totaled \$2,860,101.76 which was higher than its spending limit authorization. As a result, \$134,140.68 was reverted to the General Fund of the State Treasury (an overage of \$14,038.92). Therefore, if the tuition-exempt students had paid tuition, the estimated additional income (\$700,000) also would have been reverted to the State Treasury. In terms of System Continuing Studies income, tuition-free instruction did not result in a loss of revenue because of the spending limit restriction. However, it did create deficit problems at some colleges, as well as representing a loss in revenue for the Commonwealth of Massachusetts.

In an indirect way these tuition-free policies did create a serious academic and staff drain on the Continuing Studies Program. Its sole source of revenue is tuition and course-related fees. On an average, class enrollments must be large enough to support the total cost of the program. Since 20% of the total course enrollments in fiscal 1971 were tuition-free, the average class enrollment had to be 20% larger than was needed in order to support the program. Obviously, this caused undue strain, in the form of additional work, on the part of the instructor. Also, in many cases, it undoubtedly affected the quality of instruction. This is unfortunate for all students, but is particularly unfair to those students who paid the full tuition rate.

Tuition-exempt students are entitled to all the benefits of tuition-paying students. They enroll in courses and degree programs and have the same needs as those of tuition-paying students. For example, these students need to be processed (e.g., semester registration, degree application, constant updating of files, etc.) and are also in need of academic counseling. Although they pay all course-related fees, the amount is far less than what is required to support the expenses incurred in meeting these needs.

This can be further illustrated by showing the drain these tuition-exempt policies have on the average per-student cost. In fiscal 1971, the total course enrollments were 61,333 (including tuition-free enrollments). The approximate academic year FTE was 6,133 ($61,333 \times 3 \text{ credits} = 183,999 \text{ aggregate credit hours}$; $183,999/30 \text{ credits} = 6,133 \text{ FTE for academic year}$). The total expenditure for fiscal 1971 was \$2,725,961.08, resulting in an average per-student cost of approximately \$444 ($\$2,725,961.08/6,133 = \444). If the average per-student cost was based on tuition-paying students (FTE = 4,818), it would have been approximately \$565 or \$121 higher. Thus, these

students created a drain of \$121 on the average per-student cost, or stated another way, each FTE tuition-paying student supported each FTE tuition-exempt student to the amount of \$121.

Similar self-supporting Continuing Education Programs at the University of Massachusetts and the Massachusetts Community Colleges do not operate under the financial restrictions imposed on Continuing Studies in the state colleges. All students pay full tuition. Also, neither program has a spending limit restriction and their surplus funds can be carried over into the next fiscal year. If Continuing Studies had a similar trust fund operation, the total revenue for fiscal 1971 would have been approximately \$3,560,101.76 with an average per-student cost of \$581.

In sum, there is no question that these tuition-free policies have created a serious drain on all aspects of Continuing Studies Programs. However, of greater concern is that if all students had paid tuition and there were no spending limit restriction, the average per-student cost would have been only \$581. This is approximately 42% of the average per-student cost for Regular Program students (\$1,381) in 1970-71. This is of particular concern, considering that about 98% of Regular College Program students are undergraduates and approximately 65% of Continuing Studies enrollments are at the graduate level, which should be budgeted at a higher ratio. Recommended student-faculty budgeting ratios for undergraduate and graduate programs are 16:1 and 9:1, respectively. (The student-faculty budgeting ratio at the University of Massachusetts is 15:1 for undergraduates and graduate students, with graduate staffing at a lower ratio and undergraduate staffing at a higher ratio.)

Granted, arguments such as the following could be made: (1) if the spending limit restriction was not in effect, programs could have been expanded to the extent of raising the average per-student cost; and (2) to some degree, Regular College Programs support Continuing Studies Programs. Both of these statements are true, but the fact is that their combined contribution would not increase the average per-student cost significantly. At most, it would still be only about 60% of the Regular College Program per-student cost. Any program operating under such serious financial restrictions is bound to have serious educational problems. The current per credit Continuing Studies tuition rate (\$18) would have to be at least doubled in order for it to support the program in the same manner that the Regular College Program is supported by state appropriations. Specific cost details will be presented in the summary and recommendations section.

100 NEW DIMENSIONS OF CONTINUING STUDIES

In addition to the tuition waiver policies cited above, there is a variety of different tuition rates in effect. These variations are illustrated in Tables 3.16-3.19. These rates reflect the adjustments made to the current tuition fee of \$18 per credit for in-state students only. Proportionate adjustments have also been made for out-of-state students but have not been included in these tables since in-state residents comprise the bulk of student enrollments.

Tuition fees for Continuing Studies courses taken by Continuing Studies undergraduate students are reported in Table 3.16. With the exception of Salem, all colleges charge \$18 per credit for all courses (academic year and summer session). Note that there is no maximum fee except at Salem. Thus, a student carrying a full-time load (e.g., 15 credits) would pay a tuition fee of \$270, which is 2.7 times as much as the maximum semester tuition (\$100) charged Regular College students.

Framingham does not have an undergraduate Continuing Studies Degree Program. All students matriculate in the Regular College Program, although Continuing Studies courses may be taken as part of their course requirements. Continuing Studies course fees for matriculated Regular College students will be discussed in the next section (Table 3.17). The \$18 per credit fee reported in Table 3.16 for Framingham refers to the rate for nonmatriculated undergraduate students or for graduate students taking undergraduate courses as prerequisites for their graduate program.

For the most part, Continuing Studies undergraduate students at Salem pay the going rate of \$18 per credit. However, there are two exceptions. First, a special per credit rate of \$10 (no maximum) has been set for students enrolled in the Continuing Studies undergraduate Business Administration program. Most students in this program also hold down full-time jobs, and usually take three or less courses per semester. However, it is possible for students in this program to pay a semester tuition fee higher than the \$100 maximum paid by Regular College Program students (e.g., four 3-credit courses = 12 credits @ \$10 = \$120). The second special program is a cooperative arrangement with the nursing program at nearby Salem Hospital. Students in this program are almost exclusively full-time, and are charged the same semester tuition fee (\$100 per semester) as Regular College Students. Occasionally, students enroll on a part-time basis and are charged \$10 per credit up to a maximum of \$100.

In sum, with the exception of the specialized programs at Salem, Continuing Studies undergraduate students are charged a tuition fee of \$18 per credit, with no maximum. Thus, undergraduate degree students, who for one reason

TABLE 3.16
CONTINUING STUDIES PROGRAM
Tuition Fees for Continuing Studies Courses Taken by
Continuing Studies Undergraduate Students^a

College	Fee per Credit		Maximum Fee	Funds Reverted to
	Academic Year	Summer		
Boston	\$18.00	\$18.00	None	Continuing Studies
Bridgewater	18.00	18.00	None	Continuing Studies
Fitchburg	18.00	18.00	None	Continuing Studies
Framingham	18.00	18.00	None	Continuing Studies
North Adams	18.00	18.00	None	Continuing Studies
Salem	18.00	18.00	None	Continuing Studies
(Bus. Adm.)	10.00	10.00	None	Continuing Studies
(Nursing)	10.00	10.00	\$100.00	Continuing Studies
Westfield	18.00	18.00	None	Continuing Studies
Worcester	18.00	18.00	None	Continuing Studies
College of Art	18.00	18.00	None	Continuing Studies

^aSource: Information provided by each college.

or another must pursue their education in Continuing Studies, are forced to pay a tuition rate 2.7 times as much as that paid by Regular College undergraduate students.

Regular College undergraduate students sometimes enroll in Continuing Studies courses. Table 3.17 shows the per credit tuition fees for Continuing Studies courses taken by Regular College undergraduate students. The regular \$18 per credit fee is charged for all courses by five colleges (Boston, Bridgewater, Fitchburg, Worcester, and the College of Art).

At Framingham, all undergraduate students matriculate in the Regular College Program, that is, there is only one undergraduate program at the college. Students can register for full-time study (three or more courses) or part-time study (one or two courses). All undergraduate courses conducted in the evening and during the summer session are part of the Continuing Studies Program. Continuing Studies courses taken by students can be used to fulfill the course requirements of their degree programs; however, a separate Continuing Studies tuition fee is charged. During the academic year, Regular College full-time students at Framingham pay \$18 per credit for all

TABLE 3.17

CONTINUING STUDIES PROGRAM

**Tuition Fees for Continuing Studies Courses Taken by
Regular College Undergraduate Students^a**

College	Fee per Credit		Funds Reverted to
	<i>Academic Year</i>	<i>Summer</i>	
Boston	\$18.00	\$18.00	Continuing Studies
Bridgewater	18.00	18.00	Continuing Studies
Fitchburg	18.00	18.00	Continuing Studies
Framingham	18.00	18.00	Continuing Studies
North Adams	10.00	18.00	Continuing Studies
	18.00	18.00	
	free in limited cases	18.00	
Salem	10.00	10.00	Continuing Studies
Westfield	free for full-time students	18.00	Continuing Studies
Worcester	18.00	18.00	Continuing Studies
College of Art	18.00	18.00	Continuing Studies

^aSource: Information provided by each college.

Continuing Studies courses, whereas part-time students are charged only \$10 per credit for those courses. Part-time and full-time students pay \$18 per credit for all Continuing Studies courses taken during the summer session.

At Salem, Regular College students pay the reduced per credit tuition fee of \$10 for all undergraduate Continuing Studies courses (academic year and summer session).

At North Adams and Westfield, the regular \$18 per credit fee is charged for all undergraduate Continuing Studies summer session courses taken by Regular College undergraduate students. Westfield has established a policy whereby Regular College undergraduate students can take Continuing Studies courses during the academic year free of charge, provided classroom space is available. North Adams has two tuition policies for Continuing Studies courses taken by Regular College students during the academic year. First, students can take Continuing Studies courses free of charge, provided that the course is not also offered that semester by the Regular College. Second, if a course is offered by the Regular College and a student elects to take it in the Continuing Studies Program, the student must pay the regular \$18 per credit fee.

All tuition fees are reverted to the Continuing Studies Office of the Massachusetts State College System. At five of the Colleges, Regular College undergraduate students pay the going rate of \$18 per credit for all Continuing Studies courses they take (Boston, Bridgewater, Fitchburg, Worcester, and the College of Art). During the academic year, the per credit tuition at the other four colleges ranges from free of charge (\$0.00) to \$18. Salem is the only college that provides a reduced tuition fee (\$10) for Regular College students taking summer session Continuing Studies Undergraduate courses.

The justification for the reduced tuition rate (\$10) charged by several colleges is based on a policy established by the previous Board of Trustees (10-29-65) which read:

To authorize the admittance of students to undergraduate courses as a part of separate undergraduate programs within the Program of Continuing Studies or any other existing program, at an enrollment rate of \$10.00 per semester hour, not to exceed a total of \$100 per term or per semester, exclusive of registration and other regular fees, effective September, 1965; the programs for which this rate applies will be determined by the Director of the Division of State Colleges. [See Appendix I, Part D.]

Still another variation in tuition fees occurs when Continuing Studies students enroll in undergraduate Regular College Program courses (Table 3.18). At Boston, Continuing Studies students are not allowed to enroll in undergraduate courses conducted in either its Regular College day or evening programs. Just the opposite is true at Fitchburg, as Continuing Studies students are allowed to enroll in undergraduate courses conducted in both its Regular College day and evening programs. Worcester's plan is the same as Boston's; in other words, Continuing Studies students cannot take Regular College undergraduate courses. The situation does not apply at Framingham, since it does not have an undergraduate Continuing Studies Program. All undergraduate students at Framingham matriculate in the Regular College Program; thus, the classification "undergraduate Continuing Studies student" does not exist.

In addition to Fitchburg, five other colleges allow Continuing Studies students to take Regular College undergraduate courses. These colleges and the per credit tuition fees they charge are as follows: Bridgewater (\$7), North Adams (\$7), Salem (\$18), Westfield (\$18), and College of Art (\$18). The fees charged at Bridgewater, Fitchburg, and North Adams are the same as those charged part-time Regular College students at each institution. Salem, Westfield, and the College of Art charge \$18 per credit for Regular College undergraduate courses taken by Continuing Studies students.

TABLE 3.18
CONTINUING STUDIES PROGRAM
Tuition Fees for Courses in the Regular College Program Taken by
Continuing Studies Undergraduate Students^a

College	Fee per Credit	Fees Reverted to
Boston	NA ^b	
Bridgewater	\$ 7.00	General Fund
Fitchburg	10.00	General Fund
Framingham	NDP ^c	
North Adams	7.00	General Fund
Salem	18.00	Continuing Studies
Westfield	18.00	Continuing Studies
Worcester	NA ^b	
College of Art	18.00	Continuing Studies

^aSource: Information provided by each college.

^bNA = Continuing Studies students cannot enroll in courses in the Regular College Program.

^cNDP = No undergraduate Continuing Studies Program.

In the Massachusetts State College System, all tuition fees collected for Regular College Program courses taken by both part-time and full-time Regular College Program undergraduate students are reverted to the General Fund of the State Treasury. In Tables 3.16 and 3.17, it was reported that all tuition fees collected for Continuing Studies Program courses taken by all students (part-time, full-time, Continuing Studies, Regular College) are reverted to the Continuing Studies Office of the Massachusetts State College System. However, there seems to be confusion over the disposition of tuition fees collected for Regular College Program courses taken by Continuing Studies Program students (Table 3.18). At Bridgewater, Fitchburg, and North Adams all tuition fees for Regular College undergraduate courses taken by Continuing Studies students are reverted to the General Fund of the State Treasury; whereas, at Salem, Westfield, and the College of Art these fees are reverted to the Continuing Studies Office of the Massachusetts State College System.

Table 3.19 shows the tuition fees for Regular College Program graduate courses taken by Continuing Studies Program graduate students. Currently, five colleges (Boston, Bridgewater, Framingham, Lowell, College of Art)

TABLE 3.19

CONTINUING STUDIES PROGRAM

Tuition Fees for Courses in the Regular College Program Taken by Continuing Studies Graduate Students^a

College	Fee per Credit	Maximum Fee	Funds Reverted to
Boston	NA ^b		
Bridgewater	\$ 7.00	\$100.00	General Fund
Framingham	NA ^b		
Lowell	NP ^c		
College of Art	\$18.00	None	Continuing Studies

^aSource: Information provided by each college.

^bNA = Regular College day graduate course enrollments are restricted to full-time day graduate students.

^cNP = No Continuing Studies Program.

provide graduate courses in their Regular College Programs. A description of these programs was reported in Chapter 2. Full degree programs are operated at Boston, Framingham, and Lowell. Only graduate courses are offered at Bridgewater and the College of Art; degrees are awarded through their Continuing Studies Programs. The tuition fee question is not applicable at Lowell since it does not have a Continuing Studies Program. At Boston and Framingham, Continuing Studies graduate students are not permitted to enroll in Regular College graduate courses.

Bridgewater charges a \$7 per credit tuition fee, up to a maximum fee of \$100, for all Regular College graduate courses taken by Continuing Studies students. All tuition fees for these courses are reverted to the General Fund of the State Treasury. At the College of Art, students are charged \$18 per credit (no maximum) and fees are reverted to the Continuing Studies Office of the Massachusetts State College System. At this point, a review of the tuition fees charged by Boston, Framingham, and Lowell for Regular College Program graduate courses taken by Regular College graduate students is in order (see Chapter 2). At Boston and Framingham, all students must enroll on a full-time basis and pay \$100 per semester. At Lowell, students can enroll on a part-time or full-time basis. Full-time students are charged \$100 per semester, whereas the tuition fee for part-time is \$54 per course (\$18 per credit) up to a maximum of \$108.

From the data presented in Tables 3.16-3.19, it is obvious that there is a wide variety of Continuing Studies tuition-reduced rates. Although it was not a part of this study, and thus not reported in any tables, it became evident to the investigators that a wide range of per-credit tuition rates (\$7 per credit to \$18 per credit) also exists in Regular College Undergraduate Programs. Policies also differ in Regular College Undergraduate Programs concerning how many credit hours constitute full time in terms of tuition. For example, one college charges \$7 per credit up to a maximum of \$100 per semester (e.g., 3 credits = \$21; 6 credits = \$42; 9 credits = \$63; 12 credits = \$84; 15 credits = \$100). At another college the same \$7 per credit is charged but full tuition (\$100) is charged for 7 or more credits (e.g., 3 credits = \$21; 6 credits = \$42; 9 credits = \$100). There are two facts which are consistent system wide concerning tuition policies: (1) the maximum per-credit Continuing Studies tuition rate is \$18, and (2) the maximum Regular College Program semester tuition rate is \$100.

As has been stated several times previously, the Continuing Studies tuition-free and tuition-reduced policies have created a serious drain on its financial resources, especially with the spending limit restriction. However, it was also stated that even if all students were charged full tuition, the current rate (\$18 per credit) is too low. The Continuing Studies average student cost for 1970-71 was less than half of the lowest Regular College-budgeted student appropriation. What makes it more serious is the fact that two-thirds of the Continuing Studies students are graduate students who should be budgeted at a much higher level. Recommended student-faculty budget ratios are 16:1 for undergraduates and 9:1 for graduates.

Any program which is funded at such a low rate, whether by state appropriations or student fees, is operating under severe financial restriction. If it continues to operate in this manner over a period of time, as has Continuing Studies, it is bound to create serious educational problems. Such is the case with the Continuing Studies Program of the Massachusetts State College System.

The first section of this chapter has dealt with the administrative and financial structures of Continuing Studies. Serious problems were cited. The inference was made that any program operating under these conditions is bound to create serious educational problems, paramount of which is accreditation. In the remaining sections of this report, the effect in the following key areas will be explored:

1. faculty staffing practices;
2. administrative staffing practices;

3. supportive staffing practices (professional and nonprofessional);
4. salaries;
5. library holdings.

Faculty, Library, Administration, and Support Staff

Faculty

Continuing Studies faculties at each of the State Colleges are almost exclusively part time. The percentage of courses taught by Regular College faculty and visiting lecturers is reported in Table 3.20 (Columns II and III). At least 50% of all Continuing Studies courses are taught by Regular College faculty (Column II): 80% or more at North Adams, Salem, Westfield, Worcester, and the College of Art; 60% at Boston and Bridgewater; 55% at

TABLE 3.20

CONTINUING STUDIES PROGRAM

Percent of Continuing Studies Courses Taught by Regular College Faculty and Visiting Lecturers and Percent of Regular College Faculty Teaching in Continuing Studies^a (1970-71)

I College	II Percent of Courses Taught by Regular College Faculty	III Percent of Courses Taught by Visiting Lecturers	IV Approximate Percent of Regular Faculty Teaching in Continuing Studies
Boston	60	40	55
Bridgewater	60	40	50
Fitchburg	50	50	20
Framingham	55	45	40
Lowell	NP ^b	NP ^b	NP ^b
North Adams	80	20	35
Salem	90	10	50
Westfield	95	5	75
Worcester	88	12	35
College of Art	90	10	20
Maritime Academy	NP ^b	NP ^b	NP ^b

^aSource: Supplied by each college.

^bNP = No Continuing Studies Program.

Framingham; and 50% at Fitchburg. Column IV reveals the percentage of Regular College faculty who taught one or more courses in Continuing Studies during the academic year. The extent of involvement varied considerably from college to college. At Fitchburg and the College of Art, only 20% of Regular College faculty taught in Continuing Studies, whereas 75% were involved at Westfield. The median for the System was 40%.

At the present time, faculty members (both Regular College and visiting lecturers) teaching Continuing Studies courses during the academic year are teaching them as an overload. This is particularly critical at the graduate level, since graduate study is often considered difficult and teaching loads are decreased. This is in direct contrast to the existing situation in which teaching loads are increased from a normal 12-unit load to a 15-unit load. During our visitations, both administrators and faculty expressed due concern about the issue of "moonlighting." Of foremost importance was its effect on the quality of instruction and institutional accreditation. In recent visits, accreditation teams have been highly critical of this practice, especially at the graduate level.

The two major reasons usually cited for eliminating "moonlighting" are as follows. First, overload teaching is a drain on a faculty member's energy, which affects the quality of instruction in the overload course as well as in those courses taught as a part of the faculty member's regular teaching load. Since it is a subjective judgment, it is often challenged. The second reason is concerned with the duties and responsibilities of a faculty member in addition to his teaching assignment. For example, Regular College faculty are expected to serve on any number of all-college and department committees, in addition to serving as an academic adviser to a certain group of students. Most faculty members will agree that these assignments are necessary and quite time consuming. On the other hand, the commitment of a part-time faculty member is usually only to his course. When the number of part-time faculty is low, there is no problem. However, when the faculty includes many part-time persons as in Continuing Studies, questions such as the following need to be answered. "Who assumes all of the responsibilities and duties normally expected of full-time faculty?" "What happens to academic planning? academic counseling? developmental planning? experimental programs? research?" At some colleges, these needs are being met in a moderate way, but once again the result is an additional drain on the faculty.

In the future, all programs, day and evening, undergraduate and graduate, should be considered Regular College Programs. During the academic year, all courses should be taught as part of a faculty member's regular teaching load. Faculty should be compensated at the regular salary rates provided according

to the regular salary schedules. This should replace the practice of moonlighting in the Continuing Studies Program for overtime pay.

Graduate faculty loads should be set at 9 units, whereas undergraduate loads should be 12 units. Faculty assignments could be totally or partially: (1) at the undergraduate or graduate levels; (2) during the day or evening. Alternate methods of financing this recommendation will be discussed in a different section of this report.

Faculty Salaries

Faculty should be additionally compensated for all courses taught outside the academic year (e.g., summer session, intersession). The present salary schedule for additional teaching assignments is grossly inadequate. Tables 3.21 and 3.22 allow insight into the salary schedules or per course stipends for faculty teaching in the Continuing Studies Programs of the Massachusetts State College System. Both tables serve to outline the gross inadequacies of the payment awards for such college instruction. First, Table 3.21 shows stipends paid at the various teaching ranks in the years 1955, 1969, and 1972.

TABLE 3.21
CONTINUING STUDIES PROGRAM
Comparison of Salary Schedules or Per Course Stipends^a
1955-1972

Rank	1955 Stipend	1962 Stipend ^b	1969 Stipend ^c	1972 Stipend
Professor	\$360	\$760	\$850	\$850
Associate Professor	360	680	765	765
Assistant Professor	360	580	650	650
Instructor	360	500	560	560

^aSource: Massachusetts State College System, Central Office—Continuing Studies.

^bIn 1962 the Board of Trustees implemented a new per course stipend schedule. The stipend rates were set at 10% of Step 1 of the Regular College full-time faculty salary schedule for each academic rank (e.g., Step 1 of the 1962 Assistant Professor scale was \$5,800 or a Continuing Studies rate of \$580).

^cReflects a 12% raise (1969) consistent with the across-the-board state employees salary increase. Stipend increases were rounded off (e.g., Professor, \$91.20 (12% of \$760) to \$90.00).

TABLE 3.22
CONTINUING STUDIES PROGRAM
Appropriate Stipends Based on the 1962 Approved Stipend Formula

Rank	II		III		IV		V		VI	
	1962 Stipends Based on 10% of Regular College Salary Schedule— Step I of Each Rank		1972 Stipends and % of Current Step I		1972— Increase since 1962		Appropriate Stipend Scale for 1972 Bascd on 10% of Step I of Current Regular College Salary Schedule		Lag of 1972 Stipends to Appropriate Stipends	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Professor	\$760	10%	\$850	6.9%	\$90	12%	\$1,394	84%	\$544	72%
Associate Professor	680	10%	765	6.6%	85	12%	1,146	68%	381	56%
Assistant Professor	580	10%	650	6.8%	70	12%	952	64%	302	52%
Instructor	500	10%	560	7.0%	60	12%	796	59%	236	47%

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In 1955, all ranks received \$360.00 per three-credit course. In 1962, the stipends were increased to \$500.00 for the rank of Instructor, \$580.00 for the rank of Assistant Professor, \$680.00 for the rank of Associate Professor, and \$760.00 for the rank of Professor. These new course stipends were based on 10% of each rank's Step 1 salary rate. It should be kept in mind that although the 1962 stipends represented large percentage increases over those of 1955, the resulting stipends remained less than what regular faculty members of the State Colleges were receiving for equivalent three-credit courses. An equivalent stipend would be 12.5% (one-eighth) of the faculty member's Regular College Program salary.

In 1969 all ranks received a 12% increase consistent with the across-the-board state employees salary increase. This was the only raise since 1962, although Regular College salaries had been adjusted several times. In 1972 the Continuing Studies stipends remained the same as in 1969 although three salary increases averaging about 6% each had been awarded regular State College faculty.

Table 3.22 indicates more emphatically the inadequacies of the salary stipends paid to the Massachusetts State College's Continuing Studies faculties. Column III in Table 3.22 shows that Continuing Studies stipends per three-credit course are about 7.0% of Step 1 salaries for regular State college faculty in 1972 whereas they were 10% in 1962. If the 10% rule established in 1962 was followed, the appropriate stipends reported in Column V would represent the sum each faculty rank should be receiving per three-credit course in 1972. The percent of increase over 1962, needed to meet this requirement, ranges from 59% for the Instructor rank to 84% for the Professor rank. Column VI of Table 3.22 shows the amount and percents of increases needed presently. For example, a Professor's three-credit stipends would have to be raised to \$554.00, or 72% above \$850.00 he is presently receiving, in order to meet the "10%" policy established in 1962.

In sum (Tables 3.21 and 3.22), it is quite obvious that Continuing Studies faculty in 1972 are not being reimbursed at anywhere near the amounts which the Board of Trustees had projected for them in 1962. In fact, the reported data suggest that when compared to Regular College Program faculty, Continuing Studies faculty are receiving stipends which are inadequate, unrealistic, and very unfair.

In 1963, per course stipends were somewhat realistic. The per credit tuition fee was \$18. Since that time, all Continuing Studies operational costs have increased; for example, costs for support staff salaries, instructional materials, supplies. In addition, the large increase in tuition-fee enrollments created a

drain on its revenue. Tables 3.21 and 3.22 clearly illustrate that faculty salaries have increased at a far less comparable rate. Yet in Table 3.12 it was reported that in fiscal 1971, 88% of all expenditures were for salaries. Continuing Studies is a self-supported program and its sole source of revenue is from tuition and other course-related fees. The current tuition rate of \$18 per credit is the same as it was in 1963. Thus, operational costs have increased but its source of revenue has remained the same or decreased when you consider the drain caused by tuition-free enrollments. As a result, per course stipends have had to remain about stable to keep the program solvent.

The current tuition rate of \$18 per credit is far too low to support the program adequately. The current per course stipend schedule for courses taught by Regular College faculty during the summer session is unrealistic. Most important is the fact that the stipend schedule is so low that it cannot support the recommended staffing by full-time faculty. For example, the current System average salary for the rank of Professor is \$18,897. At \$850 per course, the annual salary for 8 courses (4 each semester) would be only \$6,800 or approximately one-third of a Regular College Professor's salary. Thus, this low tuition rate has caused a serious financial problem which has forced the Continuing Studies Program into almost a total "moonlighting" operation. If state funds are not forthcoming to support the program, then tuition fees must be raised to an appropriate level.

Table 3.23 suggests three possibilities for change. Any one of these models would serve to close the gap presently existing between current Continuing Studies salary rates and "professionally just" rates.

Model I would allow the original 10% rule to be a continuous reality. It would have one option (Column III of Model I) of increasing this to 12.5% if the Board of Trustees would agree that one three-credit course is equivalent to one-eighth of the teaching load in a typical academic year. This policy is now in effect for part-time personnel or visiting lecturers in the Regular College Graduate Program at Lowell.

Model II is the same as Model I except that "Mean" salary for the previous academic year is substituted for "Step 1" salary. Model II has the added advantage of not assuming all faculty have only "Step 1" experience in their rank.

Model III is based on an individual's actual salary, and it would cost approximately the same as Model II. Its advantage over Model II would be that it would give proportionate credit for time in rank. Its disadvantage would be that it would be more complicated for administration.

TABLE 3.23
CONTINUING STUDIES PROGRAM
Three Possible Models for Determining Per Course Stipends

Rank	Model I Base It on Step I of the Regular College Salary Schedule in Effect		Model II Base It on the Actual System Mean or Average Salary for the Previous Academic Year		Model III ^a Base It on an Individual's Actual Salary Prior to the Beginning of Each Semester	
	Step I 1971-72	Stipend Based on 10%	Estimated Mean 1971-72	Stipend Based on 10%	Estimated Average Salary 1971-72	Stipend Based on 10%
		Based on 12.5%		Based on 12.5%		Based on 12.5%
Professor	\$13,936	\$1,394	\$18,897	\$1,898	\$18,897	\$1,898
Associate Professor	11,461	1,146	15,178	1,518	15,178	1,518
Assistant Professor	9,516	952	12,457	1,246	12,457	1,246
Instructor	7,956	796	10,290	1,029	10,290	1,029

^aModel III uses hypothetical cases of faculty members at the estimated middle pay step of their respective rank.

Any of these models would go far to alleviate the injustices reported in Tables 3.21 and 3.22. The recommendation of the investigators is that per course stipend should be based on 12.5% (one-eighth) of the faculty member's Regular College Program salary (Model III).

Library—Volumes and Periodicals

Table 3.24 outlines the actual library volumes and the required volumes for each of the 11 Massachusetts State Colleges. The FTE for each college is the total FTE of all its students (Regular College and Continuing Studies, undergraduate and graduate) for the fall semester, 1971-72.

The American Library Association's standards state that a library collection should have 50,000 volumes for the first 600 full-time equivalent students and 10,000 for each additional 200 full-time equivalent students. However, the rate of growth can slow down when the number of volumes reaches approximately 300,000.

Although the State Colleges have increased their holdings to 767,500 volumes as of June 1971 (67% over 1968), they must still increase them by 145% (or by 1,116,000 volumes) in order to reach the ALA standard of 1,883,000. Each of the colleges must greatly increase their holdings. The largest needed increase is at Salem (247% or 213,600 volumes). The smallest needed increase is at Lowell, yet, the need is for a large 44% increase. Boston and Salem were held at 300,000 volumes.

Actual holdings and deficiencies of periodical titles are reported in Table 3.25. In a recent study, the Head Librarians of the Massachusetts State Colleges recommended that each of the State Colleges should have a minimum of 1,000 periodical titles to support a strong educational program.⁶ This recommendation was based on a study by the Board of Higher Education of the State of Illinois.⁷

Bridgewater is the only college that meets this recommended minimum. Deficiencies range from 18% at Fitchburg to 253% at the College of Art. The total System increase need is 4,067 titles or an increase of 59%.

⁶ *A Proposal for the Improvement of Massachusetts State College Undergraduate Library and Learning Resource Services*. Study by Head Librarians of the Massachusetts State Colleges done for the Finance Committee of the Board of Trustees, January 3, 1972, p. 9.

⁷ *Report of the Library Committee*, State of Illinois Board of Higher Education, June 1969, p. 24.

TABLE 3.24
LIBRARY VOLUMES
American Library Association (ALA) Required Holdings, Actual Holdings and Increases Needed

College	Total Student Enrollment (FTE) ^a		Holdings Increase 1968-71 ^b		Current Holdings June 1971 ^c		Required Holdings ^d		Holdings Increase Needed		Holdings Increase Needed %
	N		%		N		N		N		
Boston	6,692		120		92,000		300,000		208,000		226
Bridgewater	4,696		98		89,000		253,000		164,000		184
Fitchburg	3,338		57		73,000		186,000		113,000		154
Framingham	3,071		50		81,000		173,000		92,000		113
Lowell	2,011		67		83,000		120,000		37,000		44
North Adams	1,745		84		62,600		107,000		44,000		70
Salem	5,648		35		86,400		300,000		213,600		247
Westfield	2,576		33		62,000		148,000		86,000		138
Worcester	3,136		45		80,000		176,000		96,000		120
College of Art	1,010		131		35,000		70,000		35,000		100
Maritime Academy	287		213		23,000		50,000		27,000		117
SYSTEM	34,210		67		767,000		1,883,000		1,116,000		145

^aTotal undergraduate and graduate, Continuing Studies and Regular College enrollments (FTE) for the fall semester, 1971-72 (Tables 3.4 and 3.5).

^bSee Table 2.4.

^cSource: Study conducted by the Head Librarians of the Massachusetts State Colleges—January 3, 1972.

^dBased on American Library Association (ALA) standards.

TABLE 3.25
LIBRARY PERIODICAL TITLES
Current Periodical Titles, Required Titles, Increases Needed
1971-72

College	Total Enrollment (FTE) ^a	Actual Periodical Titles ^b	Required Periodical Increase Needed ^b		Periodical Titles Increase Needed	
			N	N	N	%
Boston	6,692	722	1,000	298	41	
Bridgewater	4,696	1,267	1,000	0	0	
Fitchburg	3,338	850	1,000	150	18	
Framingham	3,071	521	1,000	479	92	
Lowell	2,011	625	1,000	375	60	
North Adams	1,745	562	1,000	438	78	
Salem	5,648	586	1,000	414	71	
Westfield	2,576	380	1,000	620	163	
Worcester	3,136	819	1,000	181	22	
College of Art	1,010	283	1,000	717	253	
Maritime Academy	287	318	1,000	682	214	
SYSTEM	34,210	6,933	11,000	4,067	59	

^aTotal undergraduate and graduate, Continuing Studies and Regular College enrollment (FTE) for the fall semester, 1971-72 (Tables 3.4 and 3.5).

^bSources: Study conducted by the Head Librarians of the Massachusetts State Colleges—January 3, 1972; study sponsored by the Illinois Board of Higher Education.

A 5-year capital outlay program of approximately \$19,000,000 is recommended for the purchase of needed books and periodical titles (\$15 per volume).⁸ As enrollments increase, future budgets should include sufficient funds for the additional books and periodical subscriptions needed.

Administration and Support Staff

Each of the nine colleges operating Continuing Studies Programs has a director of Continuing Studies (Table 3.26). The position is full time at six of the colleges and part time at three. At North Adams and Worcester, the Directors hold faculty positions and are additionally compensated for their extra work from Continuing Studies funds on a per course formula or per diem basis. The part-time Director at the College of Art is not a regular state employee and is also paid out of the Continuing Studies account. The remaining six directors all hold budgeted positions in their Regular College administrative structure. Thus, their salaries are paid by the state, not Continuing Studies.⁹

With the exception of Fitchburg and the College of Art, each of the Colleges also has the position, Associate Director of Continuing Studies (2 full time; 5 part time). In addition, Bridgewater and Salem have part-time Assistant Directors of Continuing Studies. At Boston and Framingham, the full-time position of Associate Director is part of the Regular College administrative structure, and their salaries are paid by the state. All other Associate and Assistant Directors are part time and are paid by Continuing Studies on a per course or per diem basis.

At six of the colleges, the Director of Continuing Studies is also the Dean of Graduate Studies for the Continuing Studies Graduate Program (Boston, Fitchburg, Framingham, North Adams, Westfield, Worcester). At two colleges it is not clear whether he holds the title Dean of Graduate Studies; however, all six Directors of Continuing Studies are charged with the responsibility of the Continuing Studies Graduate Program. Three of the colleges have separate Deans of Graduate Studies in Continuing Studies. At Bridgewater and Salem it is a full-time position, whereas it is part time at the College of Art.

It was mentioned previously that three colleges conduct graduate programs in their Regular College Program which are completely separate from Con-

⁸ *Annual of Library and Book Trade Information*, R. R. Bowker Company, New York, 1970.

⁹ Nash, op. cit., p. 3.

TABLE 3.26
 CONTINUING STUDIES PROGRAM
 Analysis of Administrative Staff^a

Location	Director of Continuing Studies		Dean of Graduate Studies		Assoc. Director Continuing Studies		Asst. Director Continuing Studies	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Boston	X ^b				X			
Bridgewater	X		X			X		X
Fitchburg	X ^b							
Framingham	X ^b				X			
North Adams		X ^b				X		
Salem	X		X			X		X
Westfield	X ^b					X		
Worcester		X				X		
College of Art		X		X				
Central Office	X							

^aSource: Massachusetts State College System, Central Office—Continuing Studies.

^bDirector of Continuing Studies is also Dean of Graduate Studies.

tinuing Studies (Boston, Framingham, Lowell). At Boston, there is a separate full-time Dean of Graduate Studies for this program. Lowell does not have a Continuing Studies Program but does have a full-time Dean of Graduate Studies for its Regular College Graduate Program. At Framingham, the Regular College Program Dean of Graduate Studies is also the Continuing Studies Dean of Graduate Studies as well as the Director of Continuing Studies. Two other colleges (Bridgewater and the College of Art) offer graduate courses in the Regular College Program. However, this is on a very limited basis in both cases, and all graduate degrees are awarded by their Continuing Studies Program. The Continuing Studies Deans of Graduate Studies are also in charge of these programs.

The number of Continuing Studies support staff positions (e.g., bookkeeping, clerical) varies from campus to campus (Table 3.27). There are 40 positions in all, 34 at the colleges and 6 in the Central Office of the Massachusetts State College System. Support staff salaries are paid from Continuing Studies funds.

TABLE 3.27
CONTINUING STUDIES PROGRAM
Analysis of Clerical Staff^a

Location	Number of Clerical or Supportive Staff
Boston	7
Bridgewater	6
Fitchburg	2
Framingham	5
North Adams	2
Salem	6
Westfield	3
Worcester	2
College of Art	1
Central Office	6
SYSTEM	40

^aSource: Massachusetts State College System, Central Office--Continuing Studies.

Each institution's Continuing Studies Program is actually a college within a college. For the most part, administrators have total responsibility for all administrative, academic and financial affairs, such as:

1. fiscal matters—budget preparation, administration, and control;
2. preparation of catalogs, bulletins, brochures;
3. registration;
4. recruiting and evaluating faculty;
5. admitting and enrolling students in degree programs as well as certifying them for graduation;
6. supervision of professional and nonprofessional staff;
7. curriculum planning and revision;
8. academic counseling of students.

The preceding represents a partial list of the responsibilities and duties of these administrators. In addition, they have the responsibility for planning and directing the summer session.

The Directors of Continuing Studies and the Dean of Graduate Studies are to be commended. They have been highly successful in meeting their responsibilities in the areas of finance and administration. Unfortunately, the program

TABLE 3.28
CONTINUING STUDIES PROGRAM

Analysis of Undergraduate and Graduate Enrollments, Professional Staff, and Clerical Staff
for the Fall Semester, 1971-72^a

	Undergraduate Enrollments			Graduate Enrollments			Combined Enrollments		Professional Staff		Clerical Staff	
	Head Count	FTE		Head Count	FTE		Head Count	FTE	Total Number	Equivalent Full Time	Total Number	Full Time
Boston	420	146		2,390	1,016		2,810	1,162	2	2	7	7
Bridgewater	1,610	509		1,777	682		3,387	1,191	4	3	6	6
Fitchburg	511	161		813	186		1,324	347	1	1	2	2
Framingham	954	281		903	264		1,857	545	2	2	5	5
North Adams	308	108		456	154		764	262	2	1	2	2
Salem	1,188	487		1,372	530		2,560	1,017	4	3	6	6
Westfield	478	96		932	233		1,410	329	2	1.5	3	3
Worcester	69	18		1,010	334		1,079	352	2	1	2	2
College of Art	125	25		156	39		281	64	2	1	1	1
Central Office									1	1	6	6
SYSTEM	5,663	1,831		9,809	3,438		15,472	5,269	22	16.5	40	40

^aSources: Tables 3.5, 3.24, 3.25.

has serious problems in academic areas. These administrators are not to be blamed, as the cause is again a financial one.

At present, the Continuing Studies Program is critically understaffed (administrators and nonprofessionals). On a proportionate FTE basis, Continuing Studies Program staffs are less than 40% of Regular College Program staffs. An analysis of Continuing Studies enrollments and support staff is reported in Table 3.28. Presidents of the colleges have recognized this problem and have provided the programs with administrative positions. Approximately 50% of the Continuing Studies administrative positions are funded by the Regular College Programs. This serves to further illustrate that under the current method of funding the program is unable to support itself.

As a result of the current financial restrictions and the low tuition rate, it is virtually impossible to staff the program with the needed administrative and nonprofessional support positions. Compounding this problem is the fact that the program is also unable to support a full-time faculty. Based on the current per course stipend schedule, a full-time Continuing Studies salary would be approximately one-third that of a Regular College faculty member. Thus, it is forced into hiring a total part-time faculty.

Part-time students need as much, and in many cases more, academic counseling than full-time students. Likewise, the needs of part-time students are just as demanding as full-time students on administrators and their support staff. Ideally, staffing (administration and nonprofessional) should be based on head count rather than FTE.

Chapter 4

SUMMARY AND RECOMMENDATIONS REGARDING CURRENT CONTINUING STUDIES PROGRAMS

Currently, the Massachusetts State College System conducts two types of programs: (1) Regular College Programs, and (2) Continuing Studies Programs. Regular College Programs, both undergraduate and graduate, are fully funded by the state. Continuing Studies Programs, both undergraduate and graduate, are self-supporting type programs and thus are not funded by the state. Continuing Studies Programs are primarily highly structured, degree-oriented programs. They are quite similar and on some campuses almost identical with existing degree programs in the Regular College Programs. In their present structure, they are really an extension of the Regular College Program, inadequately funded and based essentially on overtime teaching by the faculty. (It is interesting to note that a high percentage of salaried people in current society are paid time and a half or double time for overtime. In contrast, professors teaching overtime in Continuing Studies earn only one-third to one-fourth of their regular salary.) Since the same faculty members are teaching in both Regular Program and Continuing Studies, in the main, and most of the degree programs and courses are interchangeable, the financing system is the main difference and both programs need to be considered as a totality.

In examining the Continuing Studies Programs, therefore, it was necessary to develop a complete analysis of the entire curricular program of the Massachusetts State College System. In Chapter 1 this curricular program was related to the manpower needs of the Commonwealth of Massachusetts, and the beginning diversification of the colleges' fields of study was clearly detailed. However, in comparing these fields of study with developments in comparable institutions throughout the United States, the need for additional diversification within the System is evident. The work of the National Commission on the Future of State Colleges and Universities provides data regarding curricular developments in the approximately 300 institutions of

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this type. The development in liberal arts in the Massachusetts State Colleges has been steady and relatively comparable because these programs are closely related to preparation for secondary school teaching. In the professional fields, however, the need for further diversification is obvious.¹

The most apparent need is in the field of business where comparable institutions vary between 10-20% in the percentage of students majoring in this field. The national summary of bachelor's degrees granted by these institutions indicates that 12.1% of the graduates are in the business field. This is also true at the master's degree level where 6% of all master's degrees are earned in the field of business. It is recommended that each of the nine general colleges of the System be authorized to offer undergraduate degree programs in business administration, supplementing the two which now exist at North Adams and Salem. Boston and Worcester currently have proposed expansion in this field and this definitely should be encouraged. In addition, two or three of the largest programs should move fairly rapidly into the master's degree in the field of business.

In the industrial technology and engineering areas, undergraduate development in these types of institutions is already close to 4% of the total number of graduates and is rapidly rising. It would be highly desirable to add additional programs at critical locations within the System, beyond the existing programs at Fitchburg and Massachusetts Maritime Academy.

In the health sciences, including nutrition and home economics, the Massachusetts State Colleges have made an excellent beginning. This is critical and important because medical service is one of the areas in which the Commonwealth of Massachusetts "shines" and is outstanding in the United States. In addition to further developments in nursing and medical technology, it would be highly desirable for some expansion to be planned in such fields as physical therapy, occupational therapy, sanitation, environmental controls, health administration, and the new developing baccalaureate and master's level programs in the applied health sciences. Worcester evidenced a special interest in the sanitation field during the visitations. With the developing medical complex at Worcester, additional curricula of this type should be encouraged.

¹American Association of State Colleges and Universities, *A Supplement to the Issues and Alternatives in the Future of State Colleges and Universities*, AASCU, One Dupont Circle, N.W., Washington, D.C. 20036, November 1971, pp. 9-15.

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Another important national area of development for the developing state colleges and universities is in public administration and government service including urban planning, social services, and local government administration. A number of the colleges has provided some service in these fields. Expansion in the number of programs provided in these fields is badly needed, particularly in the major urban areas of Boston, Westfield, Salem, Framingham, and Worcester. In the area of law enforcement, Salem, Westfield, and Boston, in particular, indicated some interest in further developments.

Finally, it is highly desirable that curricular provision be made for women who are currently housewives and who would like to attend college on a part-time or "long-distance" basis. These programs will be considered further in connection with the continuing education developments which are proposed later in the report. However, it is important to note here, as well, the critical nature of this current need in our society. The Massachusetts State Colleges have always served large numbers of women and because of their history and experience are in a good position to provide a special emphasis for it.

The current Continuing Studies Program, as it is organized and funded, presents a variety of problems, one of the foremost of which is its affect on accreditation. Accreditation is now a serious problem for a majority of the Massachusetts State Colleges and conceivably could be a problem for all of the Massachusetts State Colleges, even those now accredited. This is particularly true at the graduate level since most of the graduate programs of the Massachusetts State Colleges are offered through Continuing Studies. The following serve to illustrate some of the major limitations of Continuing Studies Programs due to financial restrictions:

1. Funds are not available for developmental planning or experimental programs.
2. Programs are critically understaffed (e.g., administration, clerical).
3. Academic counseling is virtually nonexistent.
4. All faculty are employed on a part-time basis.
5. All courses are taught on an overload basis, either by Regular College faculty or visiting lecturers.

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6. Course stipends are disproportionate to Regular College salaries and seriously restrict either attracting or holding outstanding instructors.
7. Library holdings at all of the state colleges are insufficient to provide a basis for accreditation at either the undergraduate level or the graduate level.

Some idea of the library problem can be seen from the following figures. In 1971, the library holdings of the various institutions varied from 23,000 to 92,000. The overall total in the entire system in 1970-71 was 767,000, an increase of 67% since 1967. Unfortunately, this increase is still insufficient as a system increase of 145% is needed to provide a proper basis for accreditation and extensive master's degree programs. A current, soon to be published, study of all state colleges throughout the United States indicates that the mean number of volumes for 233 comparable institutions of this type is 209,000 volumes. This mean for all institutions of this type in the Northeast is 153,000, compared with 236,000 in the Midwest and 370,000 in the West. Clearly, Northeastern institutions are low in mean library holdings per institution and the Massachusetts State Colleges are instrumental in keeping this mean as low as it is. In addition, libraries are seriously understaffed.

The American Library Association's standards state that the library collection should have 50,000 volumes for the first 600 full-time equivalent students and 10,000 for each additional 200 full-time equivalent students. On this basis, the total shortage for the Massachusetts State College System is 1,116,000 volumes, with individual college deficiencies ranging from 27,000 volumes to 213,000 volumes. In addition, there is a system deficiency of 4,067 periodical titles.

A 5-year capital outlay program of approximately \$19,000,000 is recommended for the purchase (and processing) of needed books and periodicals for the present student body. As enrollments increase, future budgets should include sufficient funds for the additional staff, books, and periodical titles needed.

In the future development of the Massachusetts State College System, a clear distinction should be made between "Continuing Education" and what is now called "Continuing Studies." The term "Continuing Studies" should be replaced with the term "Continuing Education." Continuing Education would encompass all community service type courses (credit and noncredit), as well as nontraditional degree programs. All traditional undergraduate and

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graduate degree programs, including degree programs now offered in Continuing Studies, should be part of the Regular College Program. Only in this way will the gross discrimination between students which is currently in existence be alleviated—discrimination in services, in fees, and in availability of program.

The economy of the Commonwealth of Massachusetts, even though it is in the process of dramatic change, has the strength and produces sufficient total personal income to support a much enlarged and expanded program in the Massachusetts State Colleges. Thus, the investigators recommend full state support or full funding of all undergraduate or graduate students attending on either a part-time or full-time basis during the day or evening program and in the fall, spring, and summer sessions.

The following recommendations apply to the Continuing Studies Program as it currently exists, emphasizing specific characteristics which should be modified and providing a variety of options for the two main categories or sources of funds: (1) state appropriations, and (2) student fees. Recommendations will be limited to all undergraduate and graduate degree courses. Specific recommendations for Continuing Education, as defined previously in this chapter, will be made separately.

OPTION I

Total State Funding of All Graduate and Undergraduate Programs during the Academic Year and Summer Session

In providing funding for the citizens of the state of Massachusetts who attend the Massachusetts State Colleges, no differential should be made between those students, both graduate and undergraduate, who attend in the summer rather than during the academic year, nor those who attend in the evening rather than during the day. The same fees should be charged for the same classes or quality of classes which would be offered at these particular times and places. At the present time there are examples which provide the justification for putting this principle into effect throughout the entire Massachusetts State College System. For example, at Lowell the Regular College Program budget provides for full state support for graduate students attending evening classes during the academic year as well as the summer session. Likewise, students attending the graduate programs at Boston, Lowell, and Framingham during the day program are supported from state

appropriations. To a small degree this is also true at Bridgewater and the College of Art. At the undergraduate level, Boston and Fitchburg conduct evening colleges which are fully funded by the state. At the University of Massachusetts, complete state support is provided all students through the doctorate degree, during the academic year and summer session. In sum, all students at each of the Massachusetts State Colleges should be supported in the same fashion as is true in these separate cases.

The criterion for funding should be full-time equivalents (FTE), consistent with the criterion used at the University of Massachusetts. Currently, funding for the Regular College Program is based on a head count for full time students rather than FTE. As a result, part-time Regular College student enrollments are very small. Presently, Continuing Studies Program students primarily enroll on a part-time basis. In terms of head count, they are 51% of the size of the Regular College student body. In terms of FTE they are 18% of the size of the Regular College student FTE. This additional amount of FTE (18%) should be added to the Regular College appropriation in order that these part-time students can be served. Many of them are working at the same time they are attending school and will be very beneficial citizens as they upgrade themselves and become more capable of contributing to the highly specialized and technically capable work force which is so important to the future of the Massachusetts economy.

Although it is assumed under funding, steps need to be taken to insure that adequate staffing is accomplished. At the present time, Continuing Studies Programs are critically understaffed (e.g., administration, counseling, clerical). Part-time students need as much, and in many cases more, academic counseling than full-time students. Likewise, the demands of part-time students on administration and their support staff are just as demanding as full-time students. Ideally, this type of staffing should be based on head count rather than FTE.

At the present time, faculty members teaching Continuing Studies courses during the academic year are teaching them as an overload and at a salary rate much lower than they receive for their Regular College teaching. This is particularly critical at the graduate level in the face of the normal expectation that graduate work should be more specialized, more demanding, and compensated at a rate of pay which is commensurate with the difficulty. Likewise, graduate study is often considered difficult enough so that teaching loads are decreased. This is in direct contrast to the existing situation in which teaching loads are increased from a normal 12-unit load to a 15-unit load, and at lesser pay. This practice should stop. It is recommended that

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graduate faculty loads should be set at 9 units, whereas undergraduate loads should be 12 units. Faculty assignments could be totally or partially: (1) at the undergraduate or graduate levels, (2) during the day or evening. During the academic year, all courses should be taught as part of a faculty member's regular teaching load. Faculty members should be compensated for teaching both undergraduate and graduate courses as a part of their regular teaching load, and at the regular salary rates provided according to the regular salary schedules. This should replace the practice of moonlighting in the Continuing Studies Program for overtime pay.

Faculty should be compensated additionally for all courses taught outside the academic year (e.g., summer session, intersession). The present salary schedule for additional teaching assignments is grossly inadequate. Three alternate plans to alleviate this situation were presented in Table 3.23. Per course stipends should be based on 12.5% of a faculty member's current salary. Per course stipends for visiting lecturers, during the academic year and special sessions, should be set at a rate commensurate with their academic and experience backgrounds.

The major cost for funding this option would be the cost of additional faculty positions, plus support staff. Based on 1971-72 data, a rough estimation for funding this option is \$14,000,000. The academic year 1971-72 Continuing Studies Program system head count is 15,472 (graduate = 9,809; undergraduate = 5,663), and the full-time equivalence is 5,269 (graduate = 3,438; undergraduate = 1,831). These are actually fall semester statistics but can be used as estimates for the academic year since past experience has shown that system statistics for the fall semester are fairly accurate predictors of the system statistics for the spring semester. If faculty are budgeted at a ratio of 16:1 for undergraduate students and 9:1 for graduate students, a total of 496 faculty would be needed (382 for graduate and 114 for undergraduate). At an average salary of \$16,000 per year (between associate and full professor ranges), this total is approximately \$8,000,000. Increasing this figure by a factor of 40% to provide for support staff and other necessary instructional support costs, an estimate of approximately \$11,000,000 is arrived at for the academic year.

Continuing Studies enrollments over the years have shown that summer session enrollments approximate one-third of the total academic year FTE or two-thirds of the average semester FTE. The cost for summer session faculty salaries will be proportionate to that for the academic year, whereas costs in support areas will be lower. The estimated cost for summer session is \$3,000,000 or 27% of the total budget for the academic year. Thus, the

estimated overall cost for funding Option I is \$14,000,000 (academic year = \$11,000,000; summer session = \$3,000,000).

In terms of current staffing ratios and faculty salaries, these figures are high, but they are reasonable in terms of developing a quality program. The current student-faculty budgeting ratio is 16:1 for both graduate and undergraduate students and the average faculty salary for the current year is \$13,963. If state support is not forthcoming to support the recommended student-faculty ratio, the program should be funded at a rate comparable to the University of Massachusetts—a student-faculty ratio of 15:1 for both undergraduate and graduate students combined. The academic year and fiscal year estimated cost totals would be \$8,000,000 and \$10,000,000, respectively.

The tuition and fee structure should be identical for all students, undergraduate and graduate, at any time of the day or any month of the year. Currently, the tuition rate for full-time undergraduate and graduate Regular College Program students is \$100.00 per semester; however, a variety of tuition fee policies exists for part-time Regular College Program students. In line with the 1965 Board policy, a tuition fee policy of "\$10.00 per semester hour, not to exceed a total of \$100.00 per term or semester, exclusive of registration and other regular fees," is recommended. This would eliminate the existing gross injustice whereby undergraduate and graduate Continuing Studies students are charged a tuition fee which is approximately 2.7 times as large as their counterparts in the Regular College Program.

At the present time, approximately 20% of Continuing Studies students are exempt from tuition. Tuition-free courses are provided veterans (World War I, World War II, Korea, and Vietnam), supervisors of student teachers, nonprofessional employees of state colleges, and faculty members from other segments of public higher education in Massachusetts. Continuing Studies is not funded by the state. It is a self-supporting program and its sole source of revenue is from student fees. Thus, the loss of revenue resulting from tuition-free courses (approximately \$700,000 in fiscal 1971) has created serious financial problems. To a lesser degree, certain Regular College Program students are also exempt from tuition. However, this has no effect on the Regular College Program since it is funded by state appropriation based on student enrollments—regardless of whether any or all of the students pay tuition. Thus, if Option I is implemented the problems associated with tuition-exempt Continuing Studies enrollments would be eliminated. All undergraduate and graduate programs would be part of the Regular College Program and the criterion for funding would be FTE.

All of the Continuing Studies Program tuition-free policies cited previously are permissive in nature; that is, they are policies adopted by the Board of Trustees of the Massachusetts State Colleges rather than state laws enacted by the legislature of the Commonwealth of Massachusetts. By law, only the University Extension Program of the State Department of Education *must* provide tuition-free instruction to veterans of World War I, World War II, and Korea. The law providing tuition-free courses to qualified Vietnam veterans refers to Regular College Programs or those which are funded by the state. Through its generosity, the Board of Trustees has opted to provide tuition-free instruction in Continuing Studies for these veterans as well as to supervisors of student teachers, nonprofessional employees of state colleges, and faculty from other segments of public higher education. A review of tuition policies for similar nonfunded programs in other segments of public higher education provides further evidence that these laws concerning veterans are not binding on the Continuing Studies Program. The Continuing Education Programs at the University of Massachusetts and the Massachusetts Community Colleges have no tuition-free policies. All students must pay the full tuition fee. All tuition-free policies relate to courses in the funded Regular College Program.

If it desired to, the Board of Trustees could continue most of these tuition-free policies under Option I, and as stated previously, with little effect on its appropriations. By law, qualified Vietnam veterans are entitled to tuition-free instruction. Also, precedent has been set for several of the other policies. For example, since Lowell does not have a Continuing Studies Program it honors student teaching, free-course vouchers in its Regular College Graduate Program. The reciprocal tuition-free policy for faculty members also appears to be legal; for example, the University of Massachusetts provides tuition-free courses to faculty members from all other segments of public higher education in its Regular College Graduate Program. The legality of providing tuition-free instruction to nonprofessional employees of state colleges, qualified active duty servicemen, and qualified veterans of World War I, World War II, and Korea needs to be explored. This is particularly true for the veterans. In addition to the law providing them with free University Extension Program courses, the legislature passed laws to assist these veterans in furthering their education. The laws vary for each different type of veteran (e.g., World War II versus Korea). Usually benefits were in the form of monthly subsistence while attending school, but did not exempt them from tuition. Thus, before additional veterans benefits are extended, the legal aspect of this policy needs to be verified by official legal opinions.

OPTION II

Total State Funding of All Undergraduate and Graduate Programs during the Academic Year Only

Option II provides full state funding for all undergraduate and graduate students, both part-time and full-time, in day and evening programs, during the academic year only. The estimated cost (see Option I) would be \$11,000,000 using student-faculty ratios of 16:1 for undergraduates and 9:1 for graduates; or \$8,000,000 using a 15:1 ratio for all students.

The summer session could either be gradually phased into full funding or remain as a self-supporting program. However, as a self-supporting program, whether temporary or permanent, it should not operate under the current administrative and financial structure of Continuing Studies. Funding should be accomplished by means of a trust fund similar to the Continuing Education Program of the University of Massachusetts and the Massachusetts Community Colleges. A trust fund operation would eliminate two current financial restrictions: (1) there would be no spending limit, and (2) unexpended funds could be carried from one fiscal year to another. With these restrictions eliminated, administrators would finally be provided with time and funds for: (1) short-term and long-range planning, and (2) developing experimental programs.

In order to be able to attract and hold outstanding instructors, a new per course stipend schedule is needed. Three models are illustrated in Table 3.23. The investigators recommend that per course stipends be based proportionately (12.5% or one-eighth) on a faculty member's Regular College salary. Thus, on an average, per course stipends would be as follows: Professor \$2,372; Associate Professor \$1,897; Assistant Professor \$1,551; Instructor \$1,286. Also, the program should be staffed (administration, counseling, clerical, etc.) in the same manner as a fully funded program.

In order to finance such a program, two major tuition policies will need to be implemented. First, all current Continuing Studies tuition-exempt and tuition-reduced policies will have to be eliminated. It appears that all are existing Board of Trustees policies and could be terminated by action of the Board. All students should pay full tuition and other related course fees in a similar manner as students taking courses in the self-supporting Continuing

Education Programs at the University of Massachusetts and the Massachusetts Community Colleges. Second, tuition rates for the summer session will have to be increased.

The estimated cost to finance a program of this nature is \$2,466 per course. This was derived by using \$1,897 (average Associate Professor per course stipend) as the average per course stipend and adding \$569 (30% of \$1,897) for all other costs (administration, support staff, educational materials, supplies, etc.). Tuition fees would have to be set at \$40 per credit or \$120 for a three-credit course, based on an average class size of 20. Total tuition revenue for 20 students in a three-credit course would be \$2,400. Additional revenue from other course-related fees (e.g., registration) would make the total per course receipts slightly higher than the estimated cost of \$2,466. As a trust fund operation, extra funds could be used for a variety of purposes such as planning and development, new programs, library books, etc. Additional surplus funds would be realized if the average class size was higher than 20 (Continuing Studies average class size for fiscal 1970-71 was 25). The tuition fee (\$40 per credit) could be reduced if the state provided funds to cover some or all of the costs over and above faculty salaries. It should be noted that basing per course stipends proportionately on a faculty member's Regular College salary (Model III—12.5%) will cause tuition rate problems. Since faculty salaries increase annually, the tuition will also have to be raised on an annual basis. Alternate approaches should be investigated, such as establishing a flat rate for each professorial rank which would be fixed for a period of time such as 3 years. When salaries are adjusted, tuition rates would be increased. An example of this is illustrated in Table 3.23, Model II. The per course stipend for all Associate Professors is \$1,897, based on 12.5% or one-eighth of the mean salary (\$15,178) for all Associate Professors in the Massachusetts State College System in September of the 1971-72 academic year.

The tuition rate of \$40 per credit is approximately 2.2 times that of Continuing Studies (\$18) and is 4.0 times as much as the recommended rate for courses in the Regular College Program (\$10). However, it is essential if high standards are to be maintained.

The magnitude of this per credit fee increase is deceiving. For example, at \$40 per credit, it is still only about 50% of the rate charged by private institutions. In general, graduate degree programs consist of 11 three-credit courses. Currently, the total tuition cost for 11 courses is \$594 (\$54 per three-credit course). If graduate programs were funded during the academic year, and all courses were taken on a part-time basis during the year, the total

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tuition cost would be \$330 ($\$30 \times 11 = \330), representing a savings of \$264 ($\$594 - \$330 = \264). If a student elected to take summer courses or was required to do so (e.g., residency), he could take as many as three before his total master's degree tuition cost approached the current Continuing Studies cost of \$594. For example:

1. 10 courses @ \$30 = \$300; 1 course @ \$120 = \$120—Total Cost = \$420.
2. 9 courses @ \$30 = \$270; 2 courses @ \$120 = \$240—Total Cost = \$510.
3. 8 courses @ \$30 = \$240; 3 courses @ \$120 = \$360—Total Cost = \$600.
4. 7 courses @ \$30 = \$210; 4 courses @ \$120 = \$480—Total Cost = \$690.

Thus, even with a \$40 per credit summer rate, the total master's degree tuition cost for most students could well be lower than the current Continuing Studies cost.

OPTION III

Total State Funding of All Undergraduate Programs during the Academic Year Only

Under Option III, all undergraduate programs would be fully funded for the academic year only. Included in this plan would be all part-time and full-time students in both the day and evening programs. The Continuing Studies undergraduate total head count and FTE for the academic year 1971-72 are 5,663 and 1,831, respectively. Using a student FTE-faculty budgeting ratio of 16:1, approximately 114 new faculty positions would be needed. At an average salary of \$16,000 per year, the cost for faculty is approximately \$2,000,000. Increasing this by a factor of 40% (\$800,000) to provide for support staff and other instructional support costs, approximately \$2,800,000 would be needed to fund all undergraduate students currently enrolled in Continuing Studies for the academic year only.

The major problem under Option III centers around graduate programs during the academic year, if state support is not forthcoming. If the Massachusetts State Colleges decide to continue offering graduate education, it must come up with an operational plan that will support all aspects of the program in a similar manner to that it requested of the state. There are

numerous alternatives or solutions to this problem. Theoretically, these alternatives are operational, but undoubtedly they will create certain administrative and financial difficulties, some of which might have legal ramifications.

A. The first alternative is to put all graduate programs on a self-supporting basis. This would mean doing away with the current funding of graduate programs in limited cases. These funds could then be used either to: (1) reduce the \$3,000,000 previously reported in this chapter (Option III) that would be required to fund all part-time and full-time, day and evening undergraduate students during the academic year, or (2) increase undergraduate enrollments.

All graduate programs would have to be self-supporting. At each college it would be a college within a college. The financial operation should be that of a trust fund (as described under Option II), rather than the current Continuing Studies financial structure. Its source of revenue would be tuition and other course-related fees. Courses could be offered during the day and evening. Although the majority of students will be classified as part-time, faculty, administration, and support staff should be full-time. In other words, in order to insure a quality program, revenue derived from student fees would have to be sufficient enough to support all aspects of the program in the same manner described under Options I and II (for the academic year) wherein the program was totally funded by state appropriations. The only difference between this alternative and the academic year part of Options I and II is the source of revenue.

Actually, this alternative is more similar to Option II which calls for full state support during the academic year, with a trust fund operation for the summer session. However, the specific recommendations concerning all aspects of graduate programs conducted during the academic year are in Option I.

All students should be expected to pay full tuition and other related course fees in a trust fund operation, since it is not a state funded program. Thus, all current Continuing Studies tuition-free and tuition-reduced policies will have to be eliminated. The legality of this action was discussed under Options I and II. However, because of the many variables involved, it is virtually impossible to establish a per credit tuition fee. In order to do this, questions such as the following need to be answered.

1. Since it is a graduate program, will the student-faculty budgeting ratio be 16:1, 9:1, or somewhere in the middle?

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2. Since it is a graduate program, will teaching loads for full-time graduate faculty be 9 hours or will they be the same as for undergraduate faculty, 12 hours?
3. What operational costs will the state assume? (e.g., heat, light, custodial, maintenance, supplies, library volumes, periodicals, etc.?)
4. What costs for professional services will the state continue to absorb, or expand? (e.g., Deans of Graduate Studies? Other professional and nonprofessional staff?)
5. Could the currently state funded position for Continuing Studies (Directors, Associate Directors, Assistant Directors) continue to be funded, but as a part of the graduate program?
6. Would state funds be available to support a System Graduate Office (professional and nonprofessional staff, and operating expenses)?

Hopefully, the state will provide funds concerning questions 3 through 6. The Commonwealth of Massachusetts should fund these positions in addition to assuming some of the operational costs. However, since salaries make up the major portion of any budget, the tuition fee will be largely determined by the student-faculty budgeting ratio.

If the current student-faculty budgeting ratio of 16:1 is used, approximately 238 faculty members would be needed to accommodate the current academic year combined Continuing Studies and Regular College Program FTE of 3,805. The cost for faculty salaries (using \$16,000 as an average) would be approximately \$3,800,000. Increasing this by a factor of 40% for support staff and other instructional support costs, an estimate of approximately \$5,300,000 is arrived at for the academic year. A per credit tuition rate of approximately \$45 (\$135 per three-credit course) would be needed to support the total cost for the academic year. If the state funded all costs over and above salaries, the fee could be reduced to approximately \$35 per credit. If the recommended student-faculty ratio of 9:1 is used, approximately 423 additional faculty would be needed. Based on the total cost for the academic year, the per credit tuition fee would have to be approximately \$80 (\$240 per three-credit course). If the state funded all costs over and above salaries, this fee could be reduced to about \$60 per credit.

Although these fees appear to be high, they are necessary for quality education. Any college that cannot operate a solvent trust fund operation

should either phase out its program or if possible reduce its offerings to the point where the program is solvent. Still another solution for colleges having financial difficulties would be to enter into a cooperative program with another college or colleges, perhaps establishing a Graduate Center. The concept of a Graduate Center is a good one; not only could it solve a financial problem, but it should serve to strengthen the graduate program by drawing on the resources of the colleges involved.

This alternative has the same tuition problems cited previously for the summer session under Option II. As faculty salaries and other related costs go up each year, the tuition rate will also need to be increased. One approach might be to charge \$60 per credit if only \$45 is needed. The surplus would be kept in the trust fund. Tuition could remain stable until the trust fund needs to be replenished. Because of the magnitude of the program and the resulting financial complexities, this alternative should be thoroughly investigated before any serious consideration is given to its implementation.

B. A second alternative calls for initial state support for part-time and full-time, day and evening matriculated graduate students during the academic year only, with a gradual phasing in of all graduate students over a 3-year period. The current estimated Continuing Studies FTE for matriculated graduate students is 1,719 which would require an additional 191 graduate faculty members (9:1 student-faculty ratio). The total cost to the state would be approximately \$4,000,000 for the academic year. If a 15:1 budgeting ratio is used, the overall academic year cost would drop to approximately \$3,000,000.

This would not affect the current funded Regular College Graduate Program since most of the students are matriculated. Tuition for all matriculated students (day and evening, part-time and full-time) would be the same as outlined in Option I, \$10 per credit up to a maximum of \$100. Nonmatriculated students should be allowed to enroll in day and evening graduate courses but their tuition rate would have to be much higher, similar to that described for the trust fund operation in the previous section (alternative A).

C. A third alternative could be to continue with the current limited funding of graduate programs, phasing in all graduate programs over the next 3 years.

All undergraduate and graduate summer sessions under alternatives A, B, and C would have to be trust fund operations. Administrative and financial guidelines were previously outlined under Option II.

The three previously cited alternatives are examples of ways that the graduate programs could be supported during the academic year if state funding was not available. The fact of the matter is that degree programs, both undergraduate and graduate, cannot continue to operate under the administrative and financial structures of the current Continuing Studies Programs. The Massachusetts State College System has recognized a need and has attempted to meet it through its Continuing Studies undergraduate and graduate degree programs. Unfortunately, the financial restrictions of the program have created serious accreditation problems, not only for degree programs in Continuing Studies, but conceivably could jeopardize accreditation for Regular College Programs.

Ideally, the Commonwealth of Massachusetts should fund all graduate and undergraduate programs of the state colleges in the same manner they are funded at the University of Massachusetts. If funds are not forthcoming from the state, and the Massachusetts State Colleges desire to continue operating these programs, then a trust fund program must be established. The trust fund, based on student fees, must be adequate enough to support these programs in the same manner as programs funded by the state. The only difference between the programs should be the source of funds.

OPTION IV

The Massachusetts State College System Should Be Prepared to Drop or Discontinue All Programs That Are Not Fully Supported by Either the State or a Trust Fund Operation—Even if This Means Eliminating the Entire Current Graduate and Undergraduate Degree Continuing Studies Programs

This should be accomplished by placing a moratorium on new enrollments and gradually phasing out the program over the next several years.

Chapter 5

CURRENT DEVELOPMENTS IN HIGHER EDUCATION AND THE EFFECT ON CONTINUING EDUCATION

The preceding three chapters have presented a review of the current situation in the Continuing Studies Program in the Massachusetts State College System and recommendations for its future development. Most of the offerings in Continuing Studies were found to be, essentially, parts of regular degree programs which have been operated with inadequate funding based on overtime teaching by the faculty. Therefore, it has been recommended that adequate funding be provided and these programs merged. However, the other parts of the Continuing Studies Program provide a base for developing a greatly expanded program of continuing higher education and the remainder of the report will be devoted to this dimension of the study. However, first, in order to consider them with proper perspective, current relevant national developments will be reviewed briefly in this chapter. The following pertinent areas influence emerging patterns in continuing higher education: (1) anticipated increases in college enrollments, (2) changing attitudes toward higher education institutions, (3) increasing costs and public demands for institutional accountability, and (4) demands for flexibility and reform in all phases of college and university operation.

College Enrollments

The "college-age group" until recently has been defined as a 4-year cohort aged 18-21. This presumed also that college students should stay in college for 4 years and finish their degree at the end of that time. Unfit or lazy students would flunk out or drop out. The "anointed" would obtain their degrees and go on to earn the greater rewards available to them, both in status and material wealth. By this definition 4% of the college-age group went to college in 1900. In 1970, 35-40% attended. By 2000 the Carnegie Commission estimates that it will level out at 50%.

In gross numbers the Carnegie Commission studies show 8,500,000 enrolled in 1970 with potential estimates of 13,500,000 by 1980, 13,300,000 by 1990, and 17,400,000 by 2000, based on the past and current trends.¹ Garland Parker's annual fall term study reported in *School and Society* indicated that 1971 enrollments of 9,000,000 confirm these estimates. However, both Parker and the Carnegie Commission note the presence of new factors at work. Students are "stopping out" more, either before or during college, and older students are entering college in greater numbers. Unpublished 1971 data from The American College Testing Program show that of prospective students who planned on entering colleges and universities 3% were over the age of 35 and several hundred were over 70. Recent changes in the draft, in the length of college degree programs and in the job market also have effects, as do resulting changes in social pressures making it less important to obtain college degrees. At the same time, improved access to higher education for ethnic minorities, increased student aid in various forms for the poor, and pressure for equal rights for women are factors which build enrollments. With such trends as these in mind the Carnegie Commission has suggested that 1980 enrollments may be 12,500,000 (1 million less), with 12,300,000 in 1990, and 16,000,000 in 2000.² Even with the lower estimates the growth factor during the 1970s is huge and will require great financial efforts.

Cost of Higher Education

Bowen has shown that American higher education is a

thriving, going concern, [in which] since 1955, enrollments have risen from 2,800,000 to 7,800,000, total expenditures have increased more than fivefold from \$4.1 billion to \$22.5 billion, and cost per student has risen from \$929 to \$1,865. Whereas in 1955-56 the expenditures of colleges and universities were 1.0% of the GNP, in 1969-70 they were 2.4%. This prosperity has resulted in the establishment of hundreds of new institutions, an enormous building program, and the raising of academic salaries to respectably competitive levels. It has also resulted in widespread extension of higher education to socioeconomic classes not previously participating and in notable improvements in the rigor and richness of the education provided.³

¹ *A Digest of Reports and Recommendations*, Carnegie Commission on Higher Education (1947 Center Street, Berkeley, California 94704, 1971), pp. 85-86.

² *Ibid.*, p. 86.

³ Howard R. Bowen and Gordon K. Douglass, *Efficiency in Liberal Education* (New York: McGraw-Hill, 1971), p. 1.

He has projected total expenditures in 1980 as \$39 billion for an enrollment of 11.5 million students at an average cost per student for educational and general expenditures of \$2,852. This is a further increase in total expenditures as a percentage of gross national product from 2.4% to 2.8%.⁴ However, in the last 2 or 3 years increases have slowed tremendously from both public and private sources. Increasingly there are demands for optimum use of the funds given or appropriated for higher education, in the name of "accountability," "cost efficiency," and increased "productivity." Levels of support which became habitual in well-supported colleges and universities in the 1960s have been cut back materially but they are still significantly in excess of support standards which were prevalent immediately after World War II and into the early 1950s.

Along with this lower level of support for higher education by voters through their legislatures and donors, there is a continuing demand for more opportunity for students of all types to have access to higher education, as pointed out previously. Voters and donors still want higher education opportunities for themselves and for their children. In addition they want higher education which is relevant to their needs and society's needs and increasingly they want it for themselves as well as their children.

Demands for Flexibility and New Educational Forms

Increasing problems of access have raised serious questions regarding some long accepted principles of collegiate operation. For example, there are serious questions such as: (1) Does education have to be a full-time activity? (2) Do the students need to be physically present in the classroom? (3) Are degree requirements best fulfilled by an accumulation of 120 credit hours from small discrete units of study? or (4) Is the current curriculum broadly based enough to provide for the needs of an ever changing society?

A number of *social and economic forces outside the colleges and universities are promoting this academic revolution* such as, (1) the growing understanding and appreciation of the importance of lifelong learning; (2) a technological revolution which brings increasingly heavy demands for talent; (3) the "knowledge explosion" that makes an engineer, a pharmacist, or a physician out of date almost before the ink on his diploma is dry; (4) a rising demand for upgraded skills for old jobs and new skills for new jobs; (5) realization that we have wasted talent inhabiting both slums and suburbia; (6)

⁴Ibid.

prison reform that fairly shouts for rehabilitative educational programs; (7) the need for education demanded by the handicapped, both physical and mental; (8) the realization that the talents of many women lie idle; (9) an awareness that the aged could and should be more productive—and happier; (10) the need to eliminate the cultural deprivation of those deprived of educational opportunities as much from handicaps of geography as from finances; (11) an awareness that we are a poorly informed citizenry, that many of our citizens do not understand the world in which we live, to say nothing of the international, national, and local issues we should be resolving as voting citizens; (12) concern about how we use our leisure time; (13) the constant need to increase productivity of both farm and factory; (14) the ever-present problems of the community; (15) the unanswered question of how to resolve the social ills of race, poverty, health, land use, pollution, and a thousand others; and (16) concern for how we adjust from a rural to an urban society with a resulting change in value systems.⁵

To cope with these forces, higher education has responded favorably in many cases and in others has been very slow to respond. If the *principle of lifelong learning* is accepted, and we organize ourselves to be a "learning society" there will be less emphasis on a closed 4-year period of college preparation for life. Already there are demands for changes in "time" and many instances of new *3-year programs*. In addition, there is an increased willingness to provide *credit for work experience* and to provide *credit by examination*. Such diverse institutions as DePauw University, San Francisco State College, George Washington University, the State University of New York, and Duke University have instituted programs which can lead to the completion of the baccalaureate degree in 3 years, based on various combinations of early admission, credit by examination, or the actual shortening of the bachelor's degree from 120 to 90 semester hours.⁶

In the curricular area significant expansion is taking place in the development of such fields as human services, environmental studies, planning systems, and varied specialized programs in the health sciences. The need for practical as well as theoretical education has always been present and is even more so in our current technological society. Even the liberal arts have never been static and the course work in economics, business, psychology, anthropology, and

⁵These materials are paraphrased from fugitive materials made available to the authors by Dr. Donald McNeil, Chancellor, University of Maine.

⁶Innovations, Part I: Three Year Degrees, New Flexibility, *College Management* (October 1970): 20-22.

engineering is often an accepted part of a liberal arts degree where a century, or even 50 years ago, much of it was unacceptable. Many of the new subjects, originally for practical purpose, have become part of the accepted roster of higher education. At this critical time in history it is important that these forces be speeded up. In particular it is important to recognize the need for "learning how to learn" in the first place and recognizing the continuing need for retraining and reeducation throughout life.

Changes in instructional methods and the increasing use of technology have been mentioned previously. However, it is critical to emphasize the potential which is now available to this generation, an advantage not available to any previous generation. More individualization of instruction is possible through humane use of technology. Colleges and universities have been the last part of the educational system to realize some of these advantages. Professors who have been forced to give comparable lectures over and over again, until they become bored with the material themselves, no longer have to present straight lecture material in this fashion. The valuable time of the professor can and should be reserved for those critical instructional responsibilities which require the professor to assist the students in the development of the subtle insights which come from interaction. This need has been well stated by F. W. Jessup, Secretary to the Delegacy for Extra-Mural Studies, University of Oxford, as follows:

Universities are having to adopt, sometimes with a measure of reluctance, new approaches to teaching and learning methods. Closed-circuit television, as well as radio and open-circuit television, tapes, cassettes, language laboratories and a variety of self-instruction devices mean that teacher and student no longer need to be in the same room at the same time, or even in the same university. With the variety of means of communication which are becoming available it is scarcely fanciful, although perhaps unattractive, to contemplate the university of the future as a dispersed community with a geographical centre containing little more than the communication machinery.⁷

It is interesting to note that the British Open University closely approximates Mr. Jessup's "university of the future," if you add to it the highly select group of professional staff which prepared the learning materials and conducts a small graduate program at the university center.

From the changing social demands for new curricula, flexible operational patterns, essentially open access to higher education, and innovative uses of

⁷F. W. Jessup, "The Changing Role of Universities in Adult Education," Conference Paper presented to the International Congress of University Adult Education in Montreal, 1970, p. 9.

modern technology, strong currents for change have developed in American higher education. Many of these changes have been waiting, sometimes in embryonic stages and sometimes in almost fully developed stages, for recognition by the full field of higher education. Divisions of extension and developing programs of continuing education have spawned many such programs and are in a position to provide valuable experience and innovative leadership, if allowed to do so, in the coming years.

Continuing Education: Current Programs and Their Developments

Universities over the centuries often have been important but peripheral institutions in society, relatively slow in adapting internal affairs to the developments in the external world. It has been

an institution traditionally designed to train a social elite for religious, administrative and professional work which was not ready for the development of mass education—the change of attitude in education from elite privilege to popular expectation—nor for the training of large numbers of skilled professionals for managerial and teaching work that called for more than a secondary-level education As these demands have increased, so has criticism mounted: Where education was known to be a catalyst to social and economic development, the institutional monopoly of university professionals over higher education had retarded the creation of resources Students were being taught according to a model that was geared to the previous state of technological advance *The university's resistance to vocationalism and its refusal to serve popular demands made it ill-suited to achieve the necessary "output" of high level scientific and technical training* It was an unhealthy state of affairs in industrial and agricultural democracies where the degree programmes held most in disrepute in the university were those at the heart of the national economy Were we to continue with a self-serving institution, indifferent to requirements made by the agents whom it was created to serve, when this meant accepting a situation that we would never accept in any other area of our society?⁸

In spite of resistance to vocationalism university faculties normally have absorbed and monopolized the training program for many vocational and professional fields including the licensing and certification. Since these required residence at the university's geographic location, opportunity was very limited. A milestone in the recognition of external education came with the development of the University of London which, for two-thirds of a century prior to 1900, was strictly an examining and degree-awarding center for students whose learning had taken place at other institutions or "on their

⁸Michael Huberman and Paul Bertelsen, "Renovation in Higher Education: Dynamics of Interaction between the University and Adult Education," Conference Paper presented to the International Congress of University Adult Education in Montreal, 1970, p. 9.

own." This degree has had its limitations but nevertheless it was revolutionary in that it made accreditation possible without meeting residence requirements and without exposure to a certain number of hours from a given faculty.

In the United States extension programs developed in the land grant universities have had a major impact on agriculture, teacher education, and many other critical and important educational developments. The experiences of the investigators over 30 years have provided many illustrations of the cutting-edge work of extension divisions of this type.

Many private universities, also, have developed extension programs, or evening "university colleges" which are quite comparable. At Harvard, for example, university extension celebrated its 60th year in 1969-70 and has awarded associates in arts degrees since 1913, and the adjunct in arts (a 2-year degree) after 1933. Harvard also began to offer the 2-year extension degree to women in 1933. Finally, in 1960 the faculty and governing boards established the new degree, Bachelor of Arts in extension studies. The program immediately increased by 250% and had 5,000 separate students in 1961-62. The development of the extension program is a direct result of the beneficence of John Lowell who provided the funds in 1839 to establish the Lowell lectures and later the Lowell Institute. The Harvard extension degree requires the same number of courses as the AB degree in Harvard College. In 1914 a survey indicated that one-fourth of the 940 extension students were men, with three-fourths women. One-third of the total were women teachers followed by groups of persons who were clerks, bookkeepers and stenographers, respectively. Almost 40 years later in 1952 a smaller proportion were teachers and a larger group were professional persons or persons engaged or employed in business. Thirty percent of the students were already graduates while 27% had not completed high school. Perhaps the most unusual student was a ticket agent from Brockton who later became a lawyer. He took courses in the program almost every year from 1898 to 1924. Arthur Whitten, Dean of Harvard extension in 1936, found that holders of the extension degree had careers not very different from other Harvard alumni "except that a higher proportion of them go on to graduate study than is usual in college classes!"⁹

The late 1950s were an important developmental period in extension divisions and continuing education programs throughout the United States.

⁹Reginald H. Phelps, "Two Bushels of Wheat," *Harvard Alumni Bulletin* of September 26, 1959 (reprint, no page given) and "Broadening the Base of Education," *Harvard Graduate School of Education Association Bulletin* 7(3) (Fall 1962): 13-19, 25.

The development of the baccalaureate degree at Harvard is indicative of this developmental period. A number of other outstanding degree programs especially for adults had developed during this period. Of particular interest is one of the very first at Brooklyn College in 1954. Students were enabled through an experimental degree program "to work for the regular undergraduate degree, but it makes it possible to do so in terms of acceleration, credit for life experience, possibilities for individual study, and integrates seminars in the major inter-disciplinary areas."¹⁰ Another special degree program for adults was developed in the late 1950s at the University of Oklahoma which eventually offered the Bachelor of Liberal Studies degree in 1961 in a new academic unit, the College of Continuing Education.¹¹ This unique program "combines guided independent study and intensive residential seminars of 3 and 4 weeks' duration. The independent study is planned and guided by a professor of the University faculty. An interdisciplinary team of two or three professors, assisted by resource professors as needed, directs the seminars." The four-area degree program requires independent study, primarily by correspondence, in the humanities, social science, and natural science areas, followed by an inter-area study emphasizing interrelationships of knowledge and integrating the three other areas of study. After students pass a comprehensive examination based on readings and assignments in each of the areas, they are eligible to attend the 3- or 4-week summer residential seminar, the inter-area program, and seminar programs. The "study in depth" which may be a scholarly paper or a creative work in literature, science or the arts must be completed before the final inter-area residential seminar. At the completion of this program the student is recommended for the degree. Students all over the United States (over 2,600 in 1971) are actively pursuing this degree program at the University of Oklahoma, including in that year 8 students from Massachusetts. This program has been widely copied since its development and has served as a model for a number of the other programs which have developed in the late 1960s. It is interesting to note that the program has also developed into a Master of Liberal Studies program offered by the University of Oklahoma, and on campus a comparable undergraduate degree program is now available. Thus this program has had effects on its own campus and has served as a prototype for "long-distance" special degree programs at a number of other institutions.

¹⁰A. A. Liveright and Roger DeCrow, *New Directions in Degree Programs Especially for Adults*, Center for the Study of Liberal Education for Adults (4819 S. Greenwood Avenue, Chicago, Illinois, 1963), p. 3.

¹¹Roy Troutt, *Special Degree Programs for Adults: Exploring Nontraditional Degree Programs in Higher Education* (Iowa City, Iowa: The American College Testing Program, 1971), pp. 17-31.

Clearly, such programs meet the special goals which are implicit in degree programs for adults. Liveright and DeCrow have summarized these very concisely and have then described the characteristics of such programs in very specific detail, as follows:

1. They aim primarily at a broad, general education to develop liberally educated generalists, rather than at developing specialized vocational, technical, or professional skills.
2. They are degree programs developed especially to fit the life-patterns, and to meet the special needs and experiences, of adults.
3. They aim to develop a thirst and desire for learning and continuing education, and to provide students with skills of independent study so they may carry on programs of life-long learning.
4. They aim at developing a broad understanding of basic concepts, meaningful relationships between disciplines and subject-matter areas, and of the general organization of knowledge—rather than at providing a mass of unrelated and discrete facts and information.
5. They aim at providing skills of study and research in depth in one particular content, subject matter, or problem, area.
6. They aim at permitting adults to pursue a program of study, leading toward the substance of a degree program, through methods which make it possible for them to work at their own pace and at times available to them for study.
7. They aim to develop clear-cut and understandable educational objectives, which will permit some comparable evaluation of educational achievement and provide the prerequisites for research about the educational aspects of these programs.

These broad aims are being achieved by the different universities experimenting with degree programs for adults in different ways. Based upon discussions involving these institutions, the following emerge as important characteristics of programs developed to achieve the aims outlined above. Degree programs especially for adults include the following characteristics:

1. They make provisions for students to fit the work toward a degree to their work and home demands by permitting some study on a correspondence or individual study basis at home.
2. They stimulate skills of individual study through tutorial programs and individual reading.
3. Through the provisions outlined above, students who can provide evidence of educational attainment or achievement may accelerate their work toward a degree.

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4. They provide for broad understanding through a series of integrated seminars in the social sciences, natural sciences, and humanities areas (and sometimes in the communication area).
5. They make some provision for providing credit for life-experience toward a degree (either through credit-hours for life-experience or by permitting students to accelerate their work in interdisciplinary areas).
6. They rely heavily on counseling to assist students to develop a program of study suited to their own needs and capacities, and to permit them to make use of a variety of educational resources in working toward the educational objectives.
7. They are based on carefully developed and clearly stated educational objectives, which define the educational substance and the outcomes desired.
8. They modify the usual and traditional residence requirements for completing a degree.
9. They use a wide variety of educational techniques and methods, including educational TV, programmed learning, tapes, and correspondence study.
10. They demand study in depth in one subject-matter, content or problem area, and the completion of a paper in that area.
11. They provide for a system of evaluation, whereby it is possible to equate life-experience with the educational objectives and to provide some basis for transferability between the various degree programs for adults.
12. They provide opportunities for conducting cooperative continuing research, whereby the achievement of objectives in individual programs may be measured, and whereby results in different special degree programs may be compared with each other and with educational achievements in regular degree programs.¹²

One other critical and important development of the late 1950s and early 1960s must also be emphasized. The development of television after World War II led to extensive experimentation in the early and mid '50s in its use as an avenue of collegiate instruction. Hundreds of experiments comparing television with other types of collegiate instruction led to the almost inevitable result, there is "no significant difference." In 1962 Armand L. Hunter, now Dean of Continuing Education at Michigan State University and a leader in the development of television instruction, predicted that in the not too distant future an organized combination or "system" plan would

use broadcasting and correspondence as essential components within the total complex of existing resources that are available, to design and plan them from the start with full

¹²Liveright and DeCrow, op. cit., pp. 7-9.

consideration of the place and contribution of all the other elements, and not to use them as is now most often the case—by themselves and largely unrelated. This would produce an entirely new and different pattern of home study programs, one that would realize the potential of each medium as a part of the *whole*, related in definite and precise order to all other learning resources; this *whole* then being greater than the sum of all its parts. This is the kind of a "systems" approach to adult education in which I believe broadcasting and correspondence could play a much more significant and effective role than they now play by themselves.¹³

Current Innovative Programs in Continuing Education

During the 1960s a wide variety of continuing education courses and degree programs has been developed, along with a series of knotty questions. Some of them are as follows:

1. Is the degree program a major part of the institution's curricular offering or is it considered an extra service?
2. Is the degree program essentially for local or regional service or is it made available on a national or international basis?
3. Is there a special faculty or will the regular faculty of the institution be involved?
4. Will the program be offered by a newly created institution, by an existing institution, or by a group of institutions?
5. Will the degree be offered by the institution with the program, or by an outside examining agency or university? (Such as the University of London.)
6. What will be the entrance requirements—none at all except chronological order, some requirements although quite flexible, or rigid requirements?
7. Will residence requirements exist, either short-term annual, occasional, or not at all?
8. Will there be teaching by various means such as correspondence work, programmed materials, television, radio, and video cassettes, or will the

¹³Armand L. Hunter, "Current Uses of Audio-Visual Media in Correspondence Study," *Newer Media in Correspondence Study* (Austin, Tex.: University of Texas, 1962), pp. 28-29.

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instructional materials be basically limited to a syllabus, with reading lists and study questions?

9. Will there be local learning centers established in regions where a number of students are located, with counselors, tutors, supplementary libraries and equipment for TV and radio viewing and listening, or little or no assistance of this type?
10. Will examinations be used for diagnosing student background at entrance, potential exemption from certain course or study requirements? Will other examinations be used for assessment of final standing of the students in order to receive a degree? Will specially prepared proficiency examinations be administered, or available at various stages of learning?
11. Will the institutions provide both the instruction and the examinations for degree certification or will the instruction-teaching responsibility be separated from the examining function?
12. How will continuing education degree programs of various types be financed? Will students pay full cost or will institutions pay part of the cost from endowment and gift income or from public subvention? What types of facilities will be used?
13. Will continuing education programs be offered solely by nonprofit, public or private colleges and universities—or will proprietary institutions play a significant role?

Answers to these questions have been developed by many institutions, and in many ways. For example, Long Island University has arranged to use special railroad cars to offer courses to commuters while they travel to work. Purdue University, through its radio station WBAA, has provided "at home" instruction and reported phenomenal success. Students taking "on-the-air" courses tended to score higher on examinations than those taking the same courses in regular classrooms. In New York the New York Institute of Technology has organized a cooperative educational program with the National Tool, Die and Machining Association in which the apprentices completing the 5,000-hour apprenticeship were awarded 32 college credits toward a degree. The U.S. Department of Health, Education, and Welfare has granted \$415,000 to support an effort by 17 colleges, known as one of the several "University Without Walls" programs, and administered by the Union for Experimental Colleges and Universities based at Antioch College. The

group includes a variety of institutions, several small private liberal arts colleges, public and private community colleges, urban universities, modern comprehensive state colleges, and land grant universities, including the University of Massachusetts. Each institution has agreed to allow 50 to 100 students to develop personal contracts for individual degree programs, in consultation with a faculty counselor and teacher. Requirements are not fixed in advance by each college or university although students are expected to combine on-campus coursework, off-campus learning through adjunct experts and real work-experience, carefully documented analysis of the work-experience and a contribution to the student's field of study such as an identifiable community service, a research study, or a publishable book or article. Time served or courses attended are not criteria for the degree, but the faculty will judge how well the contract has been fulfilled and the quality of the student's progress based on prior background.

These varied attempts to "break the academic lock-step" and provide new, broadened and exciting learning experiences for degrees could be multiplied dozens of times over in colleges throughout the country. Many of these efforts build upon previous efforts of the 1950s and early 1960s such as those cited previously. A number of them are major developments with implications for planning for continuing education in Massachusetts. The following programs have been selected for description here because of their possible special significance: (1) Syracuse University's Bachelor's Degree Program in Liberal Studies; (2) the National Urban Studies Program of the U.S. Department of Housing and Urban Development; (3) the Regents External Degree Program of the University of the State of New York (the State Education Department); (4) Empire State College of the State University of New York; (5) Edison College of the New Jersey State Colleges; (6) Minnesota Metropolitan State College; and (7) the Open University of the United Kingdom. In addition, two other major developing areas are reviewed: (8) Home Study or Correspondence developments and (9) Credit by Examination. These varied approaches provide many ideas for flexible approaches meeting the needs of increasingly varied students for higher education.

The Bachelor's Degree Program in Liberal Studies at Syracuse University is designed particularly for adults, basically over 25 years of age. It is nonresidential, noncommuting, directed independent study. The program is in four levels in the fields of humanities, mathematics, social science, and science. If a person works full time at the program it can be completed in 4 years. Each student has an adviser and many different types of contacts are worked out through mutually agreed upon ways, including telephone, tapes,

mail, and required and special visits to the campus. The program is limited to people of high scholastic ability, superior command of language, an interest in reading, and a capacity for successful independent study. Students must come to the campus on one of three special weekends for interviews prior to admission. Successful admitted students may be exempted from particular areas within the four levels by individual faculty evaluation and testing. Faculty members from the regular Syracuse faculty conduct the program and counsel, instruct, and evaluate the students. Tuition for each level, including the four areas, is \$1,500. Although a student may only work on one or two areas at a time, all four areas at each level must be completed before the student can go to the next level. Students must spend 24 days on campus each year, with an 18-day seminar each summer and two 3-day weekend seminars in the fall and in the spring. The academic year starts in June and ends in May. Students come from such widespread geographical areas as Alaska, Africa, Germany, Montana, California, and Alabama, in addition to a number of locales closer at hand. The program has graduated some students from the liberal arts program and found it to be quite successful. As a result, Syracuse has recently started a comparable Bachelor of Science degree program in Business Administration. The organization of this program will be essentially the same as the one in liberal studies, with 50 out of 6,000 applicants accepted for the beginning year of the program in 1971.

The National Urban Studies Program of the U.S. Department of Housing and Urban Development provides degree programs at the Bachelor of Arts, Masters of Arts or Specialist, or 6th-year certificate levels. It is offered in 14 states for government workers while they remain on the job. Four institutions developed the innovative curricula for instruction in management and technology according to the specifications of the department. The Universities of Detroit, Northern Colorado, and Oklahoma, plus Manatee Junior College provide the instructional program and certify the degrees which are earned. A special program is developed for each individual, to meet both the student's and the employer's needs. An assessment is made of previous on-the-job experience and appropriate credit is awarded as a part of the degree program. Any previous college level study likewise is reviewed and accredited. The program started in 1969 and has provided a number of courses throughout the 14 states.

The Regents External Degree Program of the University of the State of New York (the State Education Department) was announced by President and Commissioner Ewald B. Nyquist in his inaugural address on September 15, 1970. He stated its purpose as "to serve those citizens who are, for whatever reason, unable to attend institutions of higher learning as resident students."

The degree would be awarded "to those who are able to demonstrate that they possess knowledge and abilities equivalent to those of a degree recipient from a New York state college or university, regardless of how the candidates have prepared themselves. This is the European idea of the external degree." Recognition would be given in the degree program for learning which persons had acquired on a self-study basis validated by proficiency examinations. Measurement of knowledge expected of external degree candidates would be flexible including performance, written and oral examinations. The complete possible sources of learning were to be tapped including "television, radio, the church, extension divisions, research laboratories, performing-art centers, proprietary business, trade and technical schools, historical societies, public libraries, museums, correspondence study, VISTA, the Peace Corps, industrial, commercial, governmental, and military programs—and much more." Large grants from the Carnegie Corporation and the Ford Foundation provided initial support for the program in the fall of 1971. Degrees will be the Associate in Arts Degree and the Bachelor of Science in Business Administration with a degree in Nursing Sciences to follow shortly thereafter. The Regents will offer no formal instruction thus providing only the examining function and the certification of the degree. Credit for the degrees will be based on study at accredited colleges or courses taken in extension or correspondence work. In addition, courses taken in governmental, industrial, or military programs will be considered for credit. The extensive college proficiency examination program will be used as a primary source for the validation of self-study of an independent type or other courses where the credit involved is not clearly recognized. Other national examination programs such as the College Level Examination Program will be recognized as will credits from the United States Armed Forces Institute. A pattern of 48 credits in the Humanities, Social Science-History, and Natural Science-Mathematics plus 12 credits of free electives will be required for the Associate in Arts degree. The Bachelor of Science degree in Business Administration prospectus indicates that this program will be considerably more flexible. Its two major components will be General Education and Business. The General Education component can be satisfied in six different ways ranging from a 60-credit-hour Associate in Arts degree to satisfactory scores on five proficiency examinations in approved general studies fields or special assessment of college-level knowledge gained in nontraditional ways, including evaluation and credit for "life-experience." In the Business component achievement must be demonstrated in five academic areas—accounting, finance, management of human resources, marketing, and operations management. Achievement must be demonstrated at a second level of competence in two of these areas and at a third level in one of these two areas. In addition competence is required in a sixth area titled Business

Environment and Strategy. All of these requirements can be met by examination although some may be waived on the basis of transfer credit completed within 10 years and with a grade of C or better. No time requirements, resident requirements, or units requirements are stated.

Empire State College of the State University of New York, a newly created state college (1971), offers both instruction and degree programs from a coordination center in Saratoga Springs, N.Y. Instruction will be carried on in "regional learning centers" located throughout the state of New York. Eventually 20 centers are planned for approximately 400 students. The learning centers are not colleges with classrooms and laboratory facilities but are described as "points of entry" with offices and meeting rooms. Staff will consist of 3 administrators and 13 faculty members described as "mentors." Initially, the college will offer Bachelor's Degrees and Associate Degrees in nine fields: mathematics, anthropology, economics, English, fine arts, geography, history, philosophy, and sociology. Students may enter at any time of the year and "contract" on a full-time or part-time basis for a program lasting a month, a semester, or a year. Tuition is the same as in any college of the state university, currently \$550 per year. Each "mentor" will meet regularly with assigned students to assist with studies and evaluate progress. Facilities of all colleges of the State University of New York are available to Empire State students and, on occasion, students may spend a semester or year on a regular campus. This is particularly possible when laboratory facilities will be needed.

In addition to the Empire State College program described above, another external degree program is to be available which is quite comparable to the program for the Regents External Degree program. Students are not yet active in the external degree program. However the first regional learning center for Empire State College students opened in Albany in the fall of 1971 with approximately 40 students. Centers in Rochester and New York are under way since students can start at any time during the year. Admissions are very flexible and thousands of inquiries have indicated a great interest in this developing program.

Edison College of the New Jersey State Colleges was established in December 1971 by the New Jersey State Board of Higher Education along with an external degree program which was designed to allow qualified persons to gain college credits and ultimately college degrees without being in residence and actually attending the college. It is designed to start in July 1972, and will use the college proficiency examination program of the State University of New York. The college will operate in the same way as the New York

program. Edison College will not offer instruction and the degree will be based on credits validated by examination, work experience for which credit is given and credits transferred from other college level institutions. Degrees offered and requirements will be comparable, also, to those available in the Regents program of external degrees in New York State.

Minnesota Metropolitan State College, newly created in 1971, is an upper division state college which uses the community as a campus, holding all of its classes in other facilities such as factories, banks, churches, museums, libraries, schools, and parks. Programs are focused on urban human services, urban administration, and liberal studies with special urban emphases. Students are basically expected to be adults transferring from area junior colleges, from vocational-technical institutes or possibly other colleges. In addition, the program is planned for adults who have previously dropped out of college and now wish to complete their degree or those who have acquired the equivalent of 2 years of college through work or other experience. The baccalaureate degree will be awarded on the basis of demonstrated competence rather than on the total number of credit hours accumulated or particular courses which have been taken. The program will, of necessity, be based on evaluations of work experience, credit by examination, and careful evaluation of upper division field and course experiences. Classes, starting in February of 1972, for a small number of students were of a diversified nature according to the needs of the initial clientele.

The Open University of the United Kingdom was formally established as an autonomous university by Royal Charter on May 30, 1969. The British Labor Party, through Harold Wilson, originated the idea in 1963 as a University of the Air. He became Prime Minister in 1964 and assigned the responsibility for its study and development to Miss Jennie Lee, Undersecretary of the Department of Education and Science. A Parliamentary committee explored it further, published a White Paper in 1966, and a planning committee was established in 1967. Professor Walter Perry of the University of Edinburgh was designated to be Vice Chancellor even before the planning committee's proposals were adopted and the Royal Charter granted. Consequently, the Open University provided service for students by the first of January 1971, and one of the world's currently most talked-about higher education developments came into being.

Speaking at the American Council on Education in the fall of 1971, Vice Chancellor Perry vividly described the purposes of the Open University, its manner of operation, and plans for its future. The basic purpose of the Open University—or the “Open,” as it is called—was and is to provide “higher

educational opportunity for anyone wanting and deprived of it in the past." At the present time only 15% of the potential students in Great Britain participate in any form of higher education. In 1930, less than 1% attended the universities, so this is a big increase. The Open University is designed to take higher education to the vast group who had none in the past and who wish to attend. The second major idea centered on the new technological capability which can make systematically planned multi-media packages an important part of the total learning situation. Professor Perry emphasized, however, the need to be fully accreditable and therefore it was determined that they could *not* start with remedial education. The degree program which was envisioned was expected to be a first class degree program, meeting accepted standards of scholarship.

Admissions at the Open University are relatively simple. Any adult 21 years of age or older is eligible for admission. No particular academic qualifications are stated and most of the students work full time in business, industry, or in the home. An occasional student with a physical disability may be admitted, even though under 21. The admissions criteria were as follows:

Are you sufficiently prepared to benefit from and succeed in your proposed studies at degree level?

Is there a particular need for improved educational standards in your occupational group?

Is the course you wish to follow one in which we can provide adequate tutorial help?

Did you apply early or late in the list of applicants?

When we have considered all applications in the light of the answers to the first three questions—and these will be used only to a limited extent in determining acceptance—we shall accept applicants on the basis of first come first served.¹⁴

Various figures have been reported by different sources regarding the admissions and enrollments. Perhaps Dr. Perry's figures given in October 1971 may be the most accurate. He described the student body as follows: 43,000 applied and 24,000 were selected to take one or two of the four foundation courses which were offered during the first year. The year runs from January through October and is followed by the testing and examination period and the registration and counseling period for the following year. Of the original admitted group, 20,000 finished the first year

¹⁴*The Open University: Prospectus 1972* (Bletchley, Bucks., United Kingdom), p. 93.

and it was estimated at that time that as many as 17,000 might continue into the 1972-73 year as second year students. Thirty-five thousand students applied for the second year and 19,000 were to be admitted. Thus, it is clear that the Open University has met a distinct need in the United Kingdom and apparently has been quite successful in spite of some original concerns regarding the admissions system.

The program is very simple in design. The student can work for the BA degree or the BA degree with Honours. The degree may be taken in any of six different fields: arts, educational studies, mathematics, science, social sciences, or technology. For the BA degree the student must obtain six full credits and the Honours degree is based on the completion of two additional credits. Foundation courses are offered in five of the six fields, all but educational studies. Each foundation course is a year in length and the student is expected to spend at least 10 hours a week in work on the course. Two credits for either of the degrees may be earned in first year foundation courses and the additional four credits may be in either second, third, or fourth level courses for the BA degree. For the Honours degree, two of the credits must be third or fourth level courses in the field of specialization. Educational studies are offered only as second, third, or fourth year courses of an advanced type. The Open University makes provision for exemption from as many as three of the six or eight required credits, based on prior successful work in other types of postsecondary institutions either in Great Britain or in other countries. These include the polytechnics, credits from the institutions of higher learning recognized by the Council for National Academic Awards or the University of London external degree programs.

Beyond the course organization, the most exciting and unique aspects of the Open University are its organization for guidance of students and the provision of learning opportunities. The United Kingdom is divided into 12 regions which coordinate the work of about 250 study centers. At the local study centers each person interested in, or registered for, courses finds personal attention available. At the very beginning, after an admissions form has been sent to the central office, counselors in the regional office and the local center receive the admissions form and advise the student on the application and the University as to whether the student is really prepared to carry on studies at the bachelor's degree level. Students considered inadequately prepared are advised regarding alternative methods of study or desirable personal preparatory work which is advisable before making later reapplication. The students are not turned down and are allowed to let their application stand if they wish to do so.

After admission and the beginning of instruction, students meet at the local centers with class tutors who will provide face-to-face discussion on particular foundation course assignments and current lessons. Counselors are often available if there are questions about any of the arrangements. Television and radio sets can be used for listening and viewing in case the student does not have these facilities in the home. Finally, in the local center the students have a chance to meet each other and carry on discussion and provide mutual support in their educational efforts.

The instructional program is designed to provide weekly correspondence lessons of a very detailed nature in each of the foundation courses. Each week there are 25-minute television and radio presentations which amplify, supplement, or help to explain the particular lessons. Students may listen or see these presentations again at the local study center if they wish to do so. In addition, supplemental Open Forum Programs are broadcast each month on both radio and television, with representative groups of students and members of the professional staff discussing some of the issues raised in the courses. Each course is 36 weeks long, running from January through October, with seven short vacations during this period. These allow students to take vacations, to make up missed lessons, and provide some flexibility in the total program.

A critical and important part of the instructional system is the study guide and the package of correspondence materials containing topics to study and assignments to complete. This is the core of the instructional program as prepared by the highly selected central professional staff of the Open University. Of similar importance is the correspondence tutor who evaluates the papers sent in by the student. Papers are returned rapidly to the students, thus overcoming one of the major difficulties with correspondence courses which have been given in the United States. With 35-40,000 students in the program, there is estimated daily input and output of 5-7,000 pieces of mail. Of course, some of the grading of assignments is done by computer, but much of it is still by correspondence tutors.

The composition of the student body has been somewhat different than was originally anticipated. Most of the students were employed, one-third of them being teachers. Approximately 10% were housewives, and a very small number were in prison. About 10% of the enrollment were persons in the professions and the arts and slightly less than 10% were from each of the following groups: clerical workers, technicians, scientists, and engineers. Although one of the major purposes of the Open University was to encourage workers from industry to obtain further education, less than 4% were from

the electrical, metal, manufacturing, and related industries. Men enrolled in much greater numbers than women, with 70% of the students being males and 30% being females. Bachelor's degrees had already been earned by 4.5% of the students. This fact, plus the large number of teachers who received exemption from some courses, makes it possible for the Open University to award its first BA degrees at the end of its second year.¹⁵

The initial costs of establishing the Open University were considerable, amounting to approximately \$15 million a year. The cost of the establishment of the permanent academic staff and the preparing of the broadcast materials and the software in the course is large initially. However, each course is designed to run for 4 years before it is re-done—but for the first several years new courses will be coming on-stream regularly and in increasing numbers each year. The enrollments are so large that, as Vice Chancellor Perry stated, there is considerable "economy of scale," and he estimated that the total costs would be approximately \$500 per student if more than 10% of the students graduate. It is estimated that capital expenses are about one-third of the normal expenditure to establish a traditional university for 5,000 students, and operating costs are barely one-fifth that of a traditional university.

Costs to the student, similarly, are very reasonable, with the required fees amounting to less than one-third of the costs in an established university. Students without course exemptions, taking the regular BA with six credits over a 6-year period, would pay about \$430 to \$450. Books, of course, are additional and could amount to \$150 to \$200. Students are expected to buy the basic books for each course but supplementary readings will normally be available in nearby libraries. Costs to attend the summer 1-week seminars should be reasonable, since they are held at nearby colleges and universities. Some of the Local Education Authorities, as well as a number of big employers, have indicated their willingness to pay part or all of the summer school costs. Thus, the costs for the degree are low for both the government and the student. It is not surprising, therefore, that there has been considerable discussion in the British press and in official circles concerning the possibility that older, established universities should study carefully the methods and organization of the Open University.

The Open University has survived political squabbles, plus short lead-time, and apparently has been very successful. Shortly after it opened and broadcasted its first lessons, Britain's 250,000 postal workers went on strike.

¹⁵ *London Times Higher Education Supplement*, November 19, 1971.

There was difficulty in moving the learning-materials packages but this was successfully overcome. The special science kits for experimentation in the science foundation course, fortunately, had been sent before the strike began. The graduate program has yet to really begin, but plans are well underway for its development in the years ahead. Since the program is only 1 year old, there are, of course, questions regarding accreditation and the quality of the graduates. However, with graduates completing their work in 1972 and with increasing numbers of graduates in following years, questions of accreditation should be resolved within the next 5 years.

In terms of American higher education and its ideas, the program is definitely successful. The large group of students who applied for admission and have completed the first year are indicative of the need which is apparently being met. Although the number of blue-collar workers, the original main target of the University, is considerably below the number expected, it appears that enrollments for the second year are larger among this portion of the population. Evaluations by students have been very favorable, both with regard to the courses, the study centers, and the summer seminars. The varied student body is indicative of the wide need which is being met. For example, one 75-year-old man from South Wales took two courses because he wanted a degree and didn't feel he had a lot of time left. In the study centers there are grass roots discussions regarding the "spirit of old OU," and the students seem to be interested in getting together, although they originally signed up to work alone. As one reporter of the scene stated, "Membership in regional assemblies is not enough, they want a student union, more pleasant surroundings in the study center—and university ties and blazers!"¹⁶

Home Study or Correspondence developments have been extremely significant in recent years and are an important part of many developing external degree, nontraditional study programs. Home study is a term primarily used in connection with correspondence-type education. Although sometimes confused with independent study, "independent study" is often used to describe out-of-classroom learning of resident students. Correspondence study has been offered by private correspondence schools and through the extension programs of many universities, particularly the land grant universities. Mackenzie and others in the 1968 Correspondence Education Research Project reported that 64 colleges and universities offered correspondence programs, primarily for college credit. Of 44 of these institutions which were

¹⁶Nell Eurich and Barry Schwenkmeyer, *Great Britain's Open University: First Chance, Second Chance, or Last Chance?* (New York: Academy for Educational Development, 1971), p. 12.

contacted half of them allowed a fourth of the credit toward a degree from correspondence work and a few offered to accept as much as one-half of the degree work from this source. Mackenzie pointed out, however, the very negative attitude of educators toward correspondence study even though the academic performance of correspondence students was comparable to that of resident students. Problems with "degree mills," supposedly offering degrees based on correspondence work, is a major cause for this concern. Lacking a national central accrediting, or recognized degree-granting institution similar to Great Britain's external examination degree program at the University of London, the United States' higher education community has been somewhat suspicious of home study and correspondence work.¹⁷

Nevertheless, the growth in home study-correspondence work has been quite significant in recent years. The National Home Study Council, for 45 years the standard-setting and accrediting body in this field, has worked to overcome the problems mentioned above, resulting from nonmember institutions. Regularly this Council surveys all types of institutions offering courses by correspondence. At the present time the total approximates 5 million students, of whom 15-20% at the most are expected to complete the courses. Of this 5 million students almost half of the group are in federal and military programs. Over 1,600,000 are enrolled in the accredited member schools of the National Home Study Council. Colleges and universities enroll slightly over 300,000 and the remainder are in unaccredited private home-study schools, religious programs, or specialized programs of particular businesses and industries. Many businesses contract with accredited council members for courses which they have already prepared rather than developing internal specialized programs. (Approximately 10,000 such contracts were in effect with business and industry in 1969-70.) It is important also to note that a very high percentage of veterans, almost 20%, were taking training by correspondence study using their current GI benefits. In 1970 the figure was approaching 400,000 students.

Obviously, the extensive correspondence programs available in the United States through colleges, universities, and accredited members of the National Home Study Council, provide a large number of students who may be interested in credit by examination in the developing alternate and external degree programs.

¹⁷Amiel T. Sharon, *College Credit for Off-Campus Study*, ERIC Clearinghouse on Higher Education (Washington, D.C.: The George Washington University, March 1971), pp. 2-4.

Credit by Examination is one of the major current avenues for flexibility in alternate degree programs. Of course, for many years institutions, departments, and individual faculty members have in discrete instances provided college credit on the basis of special examinations in given fields. However, within the past decade with the increased demand for flexibility, two highly organized and extensive programs have been developed: the College Proficiency Examination Program of the University of the State of New York and the College Level Examination Program of the College Entrance Examination Board. In addition, the nation-wide program of The American College Testing Program has been used by a rapidly increasing number of institutions to provide college credit by examination.

The University of the State of New York (the State Education Department) began its *College Proficiency Examination Program* in 1963 with a grant of \$100,000 from the Ford Foundation's Fund for the Advancement of Education. It was established as a college-level examination program for colleges and universities of New York state. Originally, the University of the State of New York (as the State Education Department) did not itself grant course credit but left this to the individual institutions of higher education. As a consequence, the amount of credit accepted toward the degree varied greatly among institutions. Although a number of them did not specify a maximum amount of credit which would be allowed, most institutions specified a limit ranging between 15 and 30 credits, but Long Island University, for example, would allow as much as 64 credits to adults 21 years of age or over and after the student had a "C" average on 32 residential credits. In the 1971-72 year a high percentage of the colleges and universities in New York did provide for credit by examination through this program. Out-of-state institutions were also making use of the program, including the University of Massachusetts and Lowell State College. Institutions in New Jersey, Vermont, Illinois, Michigan, Oklahoma, and Florida also were participating, most of them in special degree programs for adults. In addition, a regular testing center is available at the New York State Resources Center in New Delhi, India, primarily for Peace Corpsmen and other Americans wishing to have college credit when they return to the United States.

In 1971 the University of the State of New York (the State Education Department) through its Division of Independent Study developed the Regents External Degree Program, providing the Associate of Arts degree and the Bachelor of Science degree in business administration and in nursing sciences. Credits from regionally accredited colleges and universities can be applied toward these degrees. The Associate of Arts degree is based on 60 credit or semester hours with 48 credits in the distribution requirement

involving humanities, social science-history, and natural science-mathematics, and with 12 credit hours of free electives. The Bachelor of Science in business administration likewise can include coursework from regionally accredited colleges as a part of its general education component or the business component. The business component provides academic areas in accounting, finance, management of human resources, marketing and operations management, with various combinations of these fields acceptable for the degree. In addition to the New York College Proficiency Examination Program examinations, the Division of Independent Study will accept satisfactory scores on the general examinations of the College-Level Examination Program as a part of the requirement for a general education component.

Anyone may take the College Proficiency Examination Program examinations without being a New York State resident. They are designed for individuals of

widely varying backgrounds, experience, and interests. Some of the possibilities are:

The adult who has mastered a subject through self-study, on-the-job experience, in an industrial training program, in a noncollegiate business or trade school, through an off-campus television course, programmed or recorded lesson, correspondence course, public school adult education, or other noncredit study

The individual who has already completed undergraduate studies but still lacks specific courses to complete requirements for a New York State teaching certificate or for a New York City teaching license

The applicant for a civil service position which requires coursework in a specific subject or subjects

The member of the armed services, Peace Corps, or other overseas service or business organizations who has gained experience and knowledge of the history, language, and culture of the area in which he served, or who has studied college subjects while abroad

The undergraduate wishing to pursue independent study

The foreign student whose academic achievements abroad cannot be readily evaluated for credit in U.S. colleges

The transfer students whose transcripts do not provide adequate basis for proper placement

The student who seeks credit for summer or year-long foreign study, or for work and study in museums, industrial research laboratories, governmental agencies, business and industry

The high school student of above average ability who has benefited from a strong secondary school program or from independent study at the college level.¹⁸

¹⁸*The New York College Proficiency Examination Program* (Albany: The University of the State of New York, The State Education Department, 1971), pp. 3-4.

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Some areas in which examinations are provided also are fields in which television courses are offered through the University of the Air. In some cases the correspondence, home-study courses of the Extension Division of the University of Nebraska or the Independent Study Program of the State University of New York provide the necessary background for preparing for the examinations. Arrangements are even available for credit in applied music with major or minor preparation in 16 instruments and voice.

The following examinations are available with recommended credit allowances, and in some cases suggested study aids such as correspondence courses, bibliographies of readings, syllabi or course outlines, and television courses when available:

1. Accounting—6 credits recommended
2. American History—6 credits recommended (TV course)
3. American Literature—6 credits recommended
4. Applied Music—2-4 credits recommended
5. Biology—6 credits recommended
6. Earth Science—6 credits recommended
7. European History—6 credits recommended
8. Freshman English—6 credits recommended
9. Shakespeare—3-4 credits recommended
10. Foreign Languages (French, German, Italian, Russian, Spanish)—variable credit in each of the five languages
11. Applied Linguistics, Civilization and Culture—3 credits recommended in each field in the five languages; Professional Preparation (Teaching Methods) in one course—3 credits recommended
12. Health I—Personal Health: Physical Aspects—12 credits recommended
13. Health II—Personal Health: Emotional, Social Aspects—12 credits recommended
14. Health III—Public Health: Environmental Health—12 credits recommended
15. Fundamentals of Nursing—5-10 credits recommended
16. Maternal and Child Nursing—Associate of Arts degree level—4-6 credits recommended
17. Maternal and Child Nursing—Baccalaureate degree level—6-12 credits recommended
18. Medical-Surgical Nursing—8-12 credits recommended
19. Psychiatric Mental Health Nursing—6 credits recommended
20. History of American Education—3 credits recommended
21. Communications in Education—2 credits recommended (TV course)
22. Educational Psychology—6 credits recommended

23. Philosophy of Education—6 credits recommended

24. Available examinations which are not presently given regularly: Anthropology A and B, Calculus A and B, Criminology, Engineering Graphics A and B, Chemistry, Physics, Statistics, Tests and Measurements. Special test administration can be arranged in these fields if there is sufficient demand.

The College Level Examination Program of the College Entrance Examination Board began 2 years later, in 1965, and was made available to colleges and universities in late 1966. This is a national program which is offered at approximately 60 test centers throughout the United States and at several hundred institutions for their own enrolled students. Several hundred thousands of students have now been tested through this program, both traditional students in regular college programs and nontraditional students who wish to pursue an alternate way toward a college degree or graduate study. The examinations are shorter in length than those offered by the New York program, being 90 minutes for the subject examinations. Brief tests (45 minutes in length) are available in a number of the subject fields.

The General Examinations are planned for the measurement of general learning in English composition, humanities, mathematics, natural sciences and social sciences-history. They vary from 60 to 75 minutes in length and each of the tests except that in English composition provides two subscores in subfields. The specialized 90-minute multiple-choice Subject Examinations (\$5.00 administered by the institutions and \$15.00 at a regular test center) are available in 34 fields as of March 1972. Many of these fields are the same as those offered by the College Proficiency Examination Program of the University of the State of New York, such as American government, English composition, or educational psychology. They are expanding into the business field but do not have the extensive offerings in the health sciences and nursing sciences of the New York State program. The Brief Tests are available for the measurement of group achievement and such examinations are not provided by the New York State program. They cost only 75 cents per test rather than \$5.00.

A third program, *The American College Testing Program*, is also used fairly extensively for credit by examination, with lower division credits given in English, mathematics, social sciences, and natural sciences. The program is administered at approximately 2,300 test centers on five national test dates each year. Approximately 2,000 institutions now use the program for its primary purposes—guidance and admission to college and placement in

appropriate courses. An increasing number of institutions use it as a basis for credit by examination. A recent study of a selected sample of participating institutions which make effective use of the ACT Assessment Program indicates that 30% of them now waive courses and award credit by examination. The English test is used for this purpose in English composition and introduction to literature; the mathematics test is used for this purpose in algebra, trigonometry, and introduction to mathematics; the natural sciences test is used in a limited number of biology, chemistry, and physics courses; and the social studies test is used for credit in American government, American history, and western civilization. Approximately equal numbers of the surveyed institutions awarded credit to students on the basis of either test results from the ACT Assessment Program or the college level and advanced placement examinations of the College Entrance Examination Board.

With the greater demand for flexibility in degree programs, particularly degree programs for adults, systems for awarding credit by examination are increasingly critical in higher education planning. As Commissioner Nyquist stated when the New Jersey Board of Higher Education voted to collaborate with New York's College Proficiency Examination and its Regents External Degree Program, such "interstate coordination of higher education programs, especially those leading to external degrees, will result in an increase in educational opportunity at a decrease in cost to residents of both states."¹⁹

Summary Comment

The ferment in American Higher Education and the pressing demands for increasing flexibility in organization and programs have led to increasing recognition of Continuing Education. The rapid development of alternate and parallel postsecondary educational institutions such as proprietary schools and colleges, home-study and correspondence, military and specialized industrial education, and labor union educational programs has pushed college and university faculties and administrators toward forms of education which were heretical only 1 or 2 decades ago. The experimentation of extension programs and continuing education programs provides a major source of ideas for adjustment to these critical demands. Donald McNeil, Chancellor of the University of Maine and a student of the possibilities of

¹⁹ *New York Times*, December 19, 1971, p. 71.

extension and continuing education, has described the situation graphically for the adult educator and for the college or university as a whole:

given resources—space, staff, and money—the results have been fantastically worthwhile. The evidence is there for all to note. See the part-time student struggling to finish his degree. See the individual situated in a remote area taking classes or correspondence courses or perhaps even a non-credit offering. See the upgrading programs for teachers, businessmen, and engineers which keep them abreast of knowledge in their fields. See the refresher courses, institutes, and conferences for the professions—medicine, law, architecture, etc. See the cultural programs for the culturally inclined, the non-credit offerings in political problems, international relations and community relations. See the study discussion groups and television programs and the special degrees for those with special aptitudes.²⁰

²⁰Donald R. McNeil, "Attitudes of Extension Personnel about Their Jobs," *Continuous Learning* (Sept.-Oct., 1963): 200-201.

Chapter 6

CONTINUING HIGHER EDUCATION IN THE MASSACHUSETTS STATE COLLEGES

A number of diverse topics must be presented in considering Continuing Higher Education in the Massachusetts State Colleges. They are organized and will be discussed as follows: (1) definitions, (2) regional needs for Continuing Education, (3) Who needs Continuing Education?, (4) current Continuing Education services of the Massachusetts State Colleges, (5) facilities available for expansion of Continuing Education, and (6) faculty attitudes toward external degree programs.

Continuing Education covers such a wide educational landscape that it presents problems of definition. For purposes of this study and report, we have adopted the definition used by the U.S. Department of Health, Education, and Welfare for "adult or continuing education" in the Higher Education General Information Survey (HEGIS), as follows:

Adult or continuing education as defined in this survey includes activities designed to meet the needs of people beyond compulsory school age whose major occupation is not that of full-time student. They enroll for a variety of reasons (civic, cultural, professional, occupational, social, etc.) in educational activities normally administered through channels other than those designed for part-time or full-time regular "day" degree program students. However, the work they take may be creditable toward a degree, although such students may not be taking work through the regular degree channels.

Attempts at further definition by the Board of Higher Education's Committee on Continuing Education and Public Service are recounted in their report of July 1, 1971. The only definition they could agree on is relatively close to the HEGIS definition, as can be seen:

For the purposes of this report [the] Committee has defined Continuing Higher Education (CHE) as teaching and learning beyond the secondary school involving mature individuals whose principal occupation has ceased to be that of student. The functions of continuing education include teaching and learning for personal growth, for vocational and professional development, and for solving community problems. (p. 3)

It is important to note, however, that the committee could *not* agree

... on a precise definition for postsecondary education. At one extreme, continuing education is related to community needs and includes education for adults not otherwise available at other institutions. But from an intellectually more rigorous point of view, the college or university is the place to go for continuing education when people have exhausted the resources of all other institutions, but have not exhausted their capacity for continued scholarly activity. (p. 4)

Within these definitions of Continuing Higher Education, and in spite of fundamental concern for the differences regarding postsecondary versus higher education, part of the study has been directed at needs and available services in Continuing Education.

Regional Needs for Continuing Education

The massive projected growth of public higher education in Massachusetts has been documented carefully by the Board of Higher Education. In its fourth annual report, growth in the State Colleges is projected from 31,503 in 1971 to 75,147 in 1980 (see Table I, p. 14). Much of Continuing Education will be beyond these estimates and program growth may well be expected to be in the same proportion. Studies of the regions of Massachusetts verify this conclusion. For example, the study of the Metropolitan Boston Area, although essentially an analysis of the future need for higher education among high school graduates, indicates that large numbers of students delay entrance but plan to attend as financial ability and available program spaces make it possible.

College enrollment data for the 1965-66 academic year show that 35 percent of all high school graduates entered college in the year of high school graduation and approximately 46 percent will have entered within five years of graduation. According to the 1965 Bureau of Census information 70 percent of high school seniors planned to go to college. Assuming the usual delayed entry into college for a number of the high school graduates, there apparently are a number of students' plans left unfulfilled, approximately 24 percent.¹

In the meantime, as the backlog grows, the need for Continuing Education multiplies in the Boston Area.

Similar findings are reported in the lower Pioneer Valley, the state's second major population area. The Regional Planning Commission analysis pinpoints

¹Patrick E. McCarthy et al., *Higher Education in the Boston Metropolitan Area* (Boston: Massachusetts Board of Higher Education, 1969), p. 33.

the growing need for educational opportunity in the next 20 years. In addition, it is far more explicit in its recommendations that all phases of higher education (including private colleges, state colleges, community colleges, and the University of Massachusetts) provide for Continuing Education needs. Its summary recommendations include the statement that

... when one looks at the complete picture and searches for means to achieve a greater degree of educational attainment for the population at large, the need for Evening Colleges, adult education, and continuing education becomes quite obvious. Equally obvious is the fact that the Springfield metropolitan area is sadly lacking in such services. To cite but one comparison, the Extension Division of the University of Rhode Island enrolls over 10,000 part-time students in its evening program in Providence. Some of these persons are working towards a degree—a plan that may take seven years to complete. Many are encouraged to continue their education by their employers who sometimes pay the tuition.²

The Commission also recommends changes in the functions of Westfield State College and expansion in particular of its continuing education-type programs. Programs are badly needed, not in Westfield (or in Amherst) but off campus, in Springfield.

Westfield State College has well over a thousand evening students, but is somewhat removed from the area of population concentration. In addition, much of this program is directed toward the field of education. . . . The evening program at Westfield State College could . . . be extended to offer more "non-education" areas of concentration. . . . It need not be an expensive program but should offer a wide variety of course offerings. This (Westfield plus the programs of private colleges and the University of Massachusetts) could be the greatest single contributor to solving the problem of educational attainment as well as the problem of "space" in the Lower Pioneer Valley. Admittedly, the carrying out of these suggestions will necessitate increasing state expenditure for higher education. A reminder that Massachusetts ranks 25th among the 50 states in the proportion of taxes utilized for higher education implies that such expenditures are long overdue.³

Who Needs Continuing Education?

One of the major questions in connection with the study of Continuing Education in the Massachusetts State Colleges is the determination of the actual composition of the constituency who need these educational services. Information on this question comes from three sources, as follows: (1) the

²Leon F. Bouvier, *Higher Education 1970-1990*, a report of the Lower Pioneer Valley Planning Commission, West Springfield, Massachusetts, 1970, pp. 61-62.

³Ibid, p. 62.

responses to the survey of faculty members in the state colleges regarding external degrees (primarily administrative members of the faculty); (2) information secured from visiting nine of the colleges, meeting and discussing the questions with almost 75 persons, including students and teaching and administrative faculty; and (3) careful investigation of the voluminous literature regarding Continuing Studies and higher education in Massachusetts. The materials and information received from these three sources indicate that the need is widespread, although there will always be a limited number of self-starters who are able to take advantage of self-study opportunities.

The survey of faculty opinion indicated five major sources, or descriptions, of students needing continuing education. These are persons over 22 years of age; mothers and housewives; full-time workers supporting families; former college students wanting to finish degrees; and some current Continuing Studies students. Housewives, primarily with children, are by all odds the biggest group of potential Continuing Education students. Many of them want to take courses during the day while the children are in school. Many of them demand that courses be required for quantification or certification before they will take them. Of the former college students, an increasing number has finished the community college programs and has gone to work. Others have "stopped out" of 4-year colleges. Both of these groups are working full-time and undoubtedly will want to continue to do so. A small proportion of the potential Continuing Education student body will be made up of "blue collar workers," but not as many as higher educationists would want to encourage to continue.

In addition to the above general classifications, there is a number of special groups with needs which should be met. In many cases they are students not now in attendance or being served in the State Colleges. Many examples in this area are persons who are in need of retraining, primarily persons from industry who want to change jobs or who are out of work; also some engineers and students who have graduated from the Maritime Academy and who wish to become teachers. A number of registered nurses want to take coursework leading to the BS in nursing or nursing sciences. Police officers want general studies degree programs. Early retired persons, often from the military service, are planning to change occupations and want to be qualified by the time they are ready for early retirement. Prospective students in prison and correctional institutions who are interested in "rehabilitation" want coursework which they can use when they are released from prison. Often businessmen such as salesmen and traveling managers need a degree for advancement and would hope to obtain it by independent study.

Of course, the State Colleges have traditionally served the teaching profession and a number of teachers will continue to want additional coursework. In particular, teachers working on "waivers of credentials" are in consistent need of continuing education. College professors variously estimate that one-fourth to one-third of all teachers are seeking professional improvement for their personal satisfaction and in order to be better teachers. Some of them have completed the MA and the work they take is purely for personal satisfaction. In addition, many teachers want to qualify for additional certification in fields of guidance, administration, or supervision of instruction.

Continuing Education of a "long-distance type" is of particular interest to physically handicapped students and others whose movements are restricted. Soldiers on military bases have more flexibility than in the past but their movements are still restricted. Prospective students in prisons, of course, are almost completely restricted and must rely on very special provisions for Continuing Education.

Finally, social change in our society may increase the need for Continuing Education as the 4-day week spreads throughout the society and workers try to develop activities which will fill this free time productively. Of course, some will "moonlight" on other jobs while others will attend regular college courses. However, Continuing Education can provide opportunities away from the college for those who wish to become better informed citizens through educational experiences which are nonvocational and taken strictly for purposes of personal enjoyment, or expanded cultural understanding. Older adults, in particular, who have never had the opportunity to go to college in the past may well relish the opportunities which can be theirs through Continuing Education.

Current Continuing Education Programs in the Massachusetts State Colleges

The survey has revealed numerous creative programs which have been and are currently underway in the State Colleges. In many cases these are indicative of potential contributions through expanded Continuing Education Programs. Several of the colleges have actively participated in programs of *inter-institutional cooperation* such as North Adams, Worcester in the Worcester Consortium, and Boston in its attempt to develop special relationships with the community colleges. In the area of *off-campus instruction*, most of the colleges have developed this in some form. Perhaps the most unique program is the Raytheon Corporation's programs with Fitchburg. Without state funding, employees of the Raytheon Corporation are able to work toward the Bachelor of Science Degree in Industrial Science with areas of concentration

in electrical technology at the Bedford and Lowell centers, in computer science at the Bedford and Andover centers, and industrial management at the Andover center. North Adams has three off-campus centers for teachers, including one in Lenox in Berkshire County, one at Bennington, Vt., and one in Montreal, Canada. Framingham and Salem have overseas summer courses. Bridgewater has a special off-campus instructional program in the summer at Hyannis. Salem has organized intern experience for early childhood education majors in England.

Work experience or internships are important characteristics of a number of other programs in the various State Colleges. All of the colleges, of course, have a tradition of requiring practical work experience as a part of the teacher education credential programs. Fitchburg and Westfield have extensive developments in vocational education, some of them involving off-campus instruction in the vocational education field. Boston provides intern or work experience in nursing and business fields, and its new upper division college proposal would provide academic credit for intern and apprentice work in many fields including business, recreation management, hotel/motel administration, social service, industrial technology, police and fire training, urban planning, and additional medical specialties. Massachusetts Maritime, of course, requires actual cruise experiences on shipboard. Framingham has nearby the Drumlin Farms which provide field experience in biology. North Adams provides field experience in business and medical technology; and Lowell, of course, provides extensive direct experience in its specialized musical curriculum.

Credit by examination is recognized by a number of institutions. For example, at Boston, 3-4% of the freshmen took the CLEP examination as did students at a number of institutions. At Lowell, six students earned 21 units of credit by examination in their Challenge Program. Lowell allows students to challenge coursework in clinical nursing and in medical technology (veterans who were laboratory assistants in the main), and allows up to 60 hours of course credit in the music program. At Worcester, over one-half of the 300 students in the English composition class in the fall of 1971 were approved for credit on the basis of the College Level Examination Program. One Worcester student from the Army earned a full 2 years of credit by examination. Obviously, there has been considerable receptivity to allowing credit by examination in the State Colleges.

Noncredit or special-credit courses in programs of community service may be more directly related to Continuing Education than the other items

previously described. The State Colleges provide a diverse and challenging mosaic of approaches in these areas. North Adams has developed its WIN program to assist citizens who need improvement in knowledge of American history and basic English language usage. North Adams also has conducted small business seminars since 1969 on business techniques, advertising methods, and safety needs. They are planning seminars on consumer education with emphasis on family budgeting and purchasing. Westfield has provided math deficiency courses and, of special interest, a critically important special workshop on drug abuse prevention. This latter workshop was conducted with a grant from the Federal Bureau of Narcotics and Dangerous Drugs. Fitchburg, of course, has developed the Raytheon program and operated 9-12 off-campus centers for the upgrading of students in industrial education and vocational education. Fitchburg also has provided special seminars for foreman training which is paid for by the companies involved. These are management seminars for the National Management Association. Some of Fitchburg's seminars for supervisors, particularly from the paper companies, have led to special certificates. Both Fitchburg and Lowell have provided training seminars for unions. Salem, for almost a decade, has conducted a special seminar in regional economics and in 1971 provided a special seminar in leather technology. Framingham has conducted a number of special noncredit or off-campus credit courses including two different courses in polymer chemistry, a special course in conversational Spanish for social and community service workers (paid for by funds from one of the nearby judicial districts), and a special seminar on personnel problems for the Framingham City Personnel Board. This diverse group of noncredit or off-campus courses is a small indication of the capability of the State Colleges to develop extensive Continuing Education Programs in these areas.

In connection with special noncredit, on- or off-campus coursework, a new system of recording such experiences has been developed by the National University Extension Association entitled the *Continuing Education Unit* (CEU). None of the colleges use it as yet but it is desirable that they start using such a program. The Continuing Education Unit is a uniform unit of measurement for noncredit Continuing Education Programs. The CEU is described as "10 contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction and qualified instruction." It has been established by the Southern Association of Colleges and Schools as "the basic instrument of measurement for an individual's participation in and an institution's offering of noncredit classes, courses, and programs." Other accrediting associations have indicated their intention, at least unofficially, to adopt a similar measure in the near future.

Facilities Available for Expansion of Continuing Education

An important part of the study was the investigation of possible facilities for the use of newer technological media and appropriate software. A survey analysis was made of the radio and television facilities currently available in the Massachusetts State Colleges. In addition, contacts were made with WGBH regarding its facilities and programming and with other sources regarding the availability of program software in higher education for use on television. A particularly unique program which may have some value in other educational settings is the PACE Program which includes filmed lectures, reading lists, books, section meetings, the grading of papers and examinations, all for crewmen of the Navy Polaris Submarine Fleet. The instructional materials and the lessons are sent out with the submarine and the section meetings, paper grading, and examinations take place in port. Two full years of work toward the Bachelor of Arts in Extension Studies at Harvard have been awarded for these courses. They are from the fields of the natural sciences, social sciences, and the humanities and some might be of value in the development of external, degree programs in the Massachusetts State Colleges.

The survey of radio and television facilities in the Massachusetts State Colleges went to the colleges in November of 1971. The form requested information about currently available equipment and facilities and plans for future expansion. On November 29, 1971, copies of this form were sent to the college representatives at each of the State Colleges. The analysis that follows is based on information received in response to this survey.

Most of the colleges in the system are still in the early stages of developing radio and television facilities and services. The reports received indicate that Bridgewater, Framingham, North Adams, Salem, Westfield, and Worcester all have small, student-operated radio stations. These stations are operated at low wattages and cater primarily to the communication and entertainment needs of the college communities in which they are located. Few educational broadcasts are made by these stations. Their primary educational contribution is probably the training of a few students in the practical aspects of station operation.

Several of the institutions have limited current television capability (Boston, Fitchburg, Framingham, North Adams, and Salem of those institutions responding). In most cases this equipment was originally purchased for use in micro-teaching, classroom instruction in speech and dramatics, or for videotaping various college or community functions. The original equipment

consisted of relatively unsophisticated portable television cameras, video-tape recorders, monitors, and pieces of support equipment. Later, studios were established in some of the institutions (Fitchburg, Framingham, North Adams, and Salem) and more extensive television equipment was purchased as the educational uses of television increased. Some systems have evolved to the point where closed-circuit TV transmission is available in many of the classrooms. Notable here is Salem State which reported that 75% of its college classrooms are now coupled to the television center by coaxial cable. All of the institutions which responded to the survey (including those which have no current television capability) indicated they have future plans which involve the installation or expansion of television facilities and services. Boston, Bridgewater, Fitchburg, Westfield, and Worcester have drawn up rather comprehensive plans for the development of television studios or instructional media centers which will include the installation of the necessary hardware to originate programs that could be shown on cable TV or public broadcast stations.

Despite these developments, it appears that little attention has been given to the use of existing radio and television facilities in Continuing Education either at the local or statewide level. Presumably many of these existing facilities could and will be adapted for use in Continuing Education Programs as plans for future television studios or media centers unfold. The institutional summaries which follow provide some indication of what facilities are presently available, where they are available and plans for the future.

Institutional Summaries

Boston

Present—No current radio capability was reported. Portable videotaping equipment is available for instructional purposes.

Future—Plans are underway to construct a 12 story North Tower building that would provide two television studios, one for black and white and one for color. These facilities would provide both closed-circuit capability and the necessary hardware to originate programs on campus that would then be transmitted to commercial stations. The plan also calls for coaxial cables to various schools in the city in order to permit maximum observation of teaching techniques for the education majors.

Plans do not currently include a radio station but one could easily be included in the architectural plans for the North Tower Building.

Bridgewater

Present—Portable television capability only is available. A small FM radio station (WBIM) is located in the Student Union.

Future—A master plan for electronic communications for instruction has been drawn up. The major features of this plan include—

1. the establishment of a 10 watt FM station and transmission tower.
2. the establishment of a centralized television studio.
3. Coaxial cable hookup between the studio and the major campus buildings.
4. 100 carrels with audio-video capability in the New Maxwell Library.
5. a new education complex with two television studios tied into the central studio. Sixty remote cameras, eighty 23-inch receivers, and 25 carrels with audio-video capability.
6. master antennas and cable hookup for major campus buildings.
7. ten remote dial access carrels in each of six dormitories.
8. a mobile television production facility.

Fitchburg

Present—The McKay Campus School Control room and Studio provide portable television and videotaping capability. The Science Building is connected to the local cable service thus allowing for the reception and recording of off-air signals in that building only.

No radio capability was reported.

Future—Full color production, recording, and distribution equipment will be installed in the existing McKay Campus School. In addition a master antenna system will be installed which will allow the recording of off-air signals and the distribution of these and studio-originated signals throughout the building.

Additional plans for the future indicate the inclusion of an observational laboratory, television, cinematography, and still photography studio complex in the proposed Industrial and Fine Arts Building. The television studio will again have full color capability and will complement that in the McKay Campus School. It will also have the capability necessary for producing programs which can be shown on public broadcast stations.

Framingham

Present—A minimum of television equipment is available for use in classroom instruction only. The newest buildings have been internally connected with empty television cable conduits.

A student owned and operated 10 watt FM radio station recently went into full operation (January 1972).

Future—Framingham has adopted the "use what we have and wait and see" attitude toward radio and television facilities and services. The long-range plan, however, is to have a full color television studio with cable connections to all campus buildings.

Maritime Academy

Present—No radio or television facilities are currently available other than a studio room with adjacent control room.

Future—The new library (to be completed in April 1972) will contain facilities for a closed-circuit television studio and a learning center for remote retrieval of sound tapes, videotapes, and sound records. Classrooms and dormitories throughout the campus will be wired to receive this audio and visual material.

North Adams

Present—A small radio club comprised of staff and students is currently operating a .1 watt radio station (WTAC-AM). The television studio in current operation is capable of originating and taping programs but is not connected with a closed-circuit system.

Future—No specific future plans have been indicated but expansion of the present system seems likely.

Salem

Present—WSSC-AM (640KC), a student-run radio station, operates on the basement floor of the Student Union.

A television studio located in the Arts & Sciences and Business Education Building is coupled in a closed-circuit system with 75% of the college

classrooms. The 12-room Horace Mann Campus Laboratory School is used for remote student teaching observations and is coupled by cable with the television studio. The closed-circuit system has three-channel broadcast capability.

Future—Future plans include the implementation of a telephone-television hookup to a recently acquired off-campus educational facility, the replacement of certain existing equipment, and the development of a complete media production center.

Westfield

Present—A radio club composed mostly of students operates a small campus radio station in very cramped quarters in the Science Building.

The New Communications Building was modified to provide a television production studio. No equipment was available in December 1971 though an extensive and apparently well-planned list of equipment was ready for submission in an amount approximating \$250,000-\$300,000.

Future—If the proposed budget for equipment and staffing were to be approved, including full color facilities, Westfield could be an important television production and transmission center. Facilities in Springfield and on Mount Tom would make it possible to reach North Adams by cable as well as much of the Pioneer Valley.

Worcester

Present—No radio or television equipment. Dial-access system just installed in new Learning Resources Center.

Future—Plans for the establishment of a radio station are likely to proceed as follows:

1972—Equipping of one control room/studio for broadcast through the dial-access system.

1972—Expansion to combination studio-music library and the addition of a news wire.

1973—Addition of two offices and a carrier current radio operation.

1974—The establishment of an open circuit FM transmitter.

Future television facilities will include a full-color three-camera studio-control room located within the Learning Resources Center. The studio complex will be capable of transmitting color programming via coaxial cable to all classrooms and dormitories.

Regional Broadcasting Capability, particularly television, provides critical and important channels through which prospective students can be reached all over the state of Massachusetts. There are two major potential resources in the television field, (1) cable television, sometimes known as pay-TV; and (2) WGBH-TV, Channel 2, and WGBX-TV, Channel 44, with their companion radio station, WGBH-FM.

Cable TV appears finally to be "rounding the corner" which has been claimed for it during the past decade. The Sloan Foundation study, "On the Cable: The Television of Abundance," was released late in 1971 and predicted that a nationwide interconnected cable system would, by 1980, bring up to 40 television channels into 40-60% of all American homes. Cable TV presumably will be financed by the collection of fees from viewers on a pre-program or per-channel basis. Franchise operators in the various cities and towns of the United States must provide one or two free channels for public use. This free channel capability may be an important method of reaching prospective students in the not too distant future, providing costs for individual set owners to use the free channels are nonexistent or very inexpensive. As one current example of this potential, Worcester State College has been informed by the Parker Cable Company that one channel of the local franchised cable TV could be available for their use for educational programming on TV. This possibility, however, rests in the future and is not an immediately available method by which to reach large numbers of students.

The WGBH-TV and radio complex, however, is currently operative through much of Massachusetts and is an extremely important and potentially useful part of any alternate or external degree offered in the Commonwealth. At the present time WGBH reports that it has no plans for complete cabling, although it does operate partially through cables in the western part of the state. By operating WGBY-TV, Channel 57, on Mount Tom close to Springfield, using two-way microwave, it is possible to reach Pittsfield and North Adams by cables from Springfield.

The extensive coverage of the WGBH complex is particularly fortunate for Massachusetts because of the flexibility and high quality of the station. It has

been described as "one of the best television stations in the United States—if not the very best. . . . WGBH is said to be public broadcasting at its most serious and innovative, both as a local station and as a prolific supplier of programs to the national PBS network."⁴ As a key station working with the Public Broadcasting Service, WGBH cooperates with WNET (New York), WQED (Pittsburgh), WETA (Washington, D.C.), KQED (San Francisco), KCET (Los Angeles), and WTTW (Chicago). These stations produce an enormous amount of programming each year for the Public Broadcasting Service, much of it very valuable for learning in higher education as well as elementary and secondary education.

At the present time WGBH is supported as an educational foundation. It is one of the major projects supported by the famous Lowell Institute, plus "Boston College, Boston Symphony Orchestra, Boston University, Brandeis University, Brown University, Harvard University, Massachusetts Institute of Technology, Museum of Fine Arts, Museum of Science, New England Conservatory of Music, Northeastern University, Simmons College, Tufts University, University of Massachusetts, Wellesley College, Yale University."⁵ In addition, considerable income is derived from individual contributions. Persons giving \$15.00 or more receive the monthly program bulletin giving details regarding all of the courses, programs, and specials which are provided by the station. The Massachusetts State College System is not officially a cooperating institution but would undoubtedly be welcome. Mr. John H. B. Irving, Director of the Educational Division, indicated to the investigators of the study that WGBH would be happy to cooperate in any way possible and "will expand in any way they could be funded." They are working directly with the Board of Higher Education's committee on external degrees and anticipate cooperating at the appropriate time.

The current higher education program is extensive and included, in the fall of 1971, such courses as Psychology I: Principles of Behavior; Engineering I: Computer Science; English III: Major American Books; The Course of Our Times; and Civilization. Some of these courses are presently viewed by students in the Massachusetts State Colleges and used as instructional assignments by some of the college instructors. At Worcester State College, for example, the Civilization series was reported of great value. It is estimated that two million persons were viewing each of the Civilization programs.

⁴Edith Efron, "Boston: Home of the Bean, the Cod and WGBH," *TV Guide* (December 18-24, 1971), p. 33.

⁵*WGBH Programs*, November 1971, inside front cover.

WGBH also is affiliated with the National Educational Television Center and presents many of the courses developed through the Center. In 1970-71, 39 courses, primarily a semester or trimester in length, were provided—from American National Government to Boolean Algebra and Computers to World History. Four of these courses were specifically described as designed for "Continuing Education."

Another important source of WGBH college courses is the long list (almost 60) of well-designed courses developed by the Chicago TV College, a unit of the City Colleges of Chicago which is fully accredited by the North Central Association to offer Associate degrees. Almost 50 courses were available during 1971-72 providing the entire curriculum necessary for a 2-year liberal arts education and sufficient specialization for community college majors in a number of fields, including business. Chicago's TV College started in 1956 and has been outstandingly successful. It served as a critical reference and base for planning of the recently developed Open University in Great Britain. It has provided educational opportunities for shut-ins, students handicapped by illness or disability, students in penal and correctional institutions, gifted high school students wishing to accelerate, and adults with time responsibilities which make it impossible for them to attend campuses for regular instruction. The largest single group of Chicago TV students planned to become teachers and some of their courses have been developed jointly with the former Chicago Teachers College for this purpose. In addition to course registrations, the not-for-credit enrollment was equally as large. Each television course includes a teleclass study guide which has been carefully programmed to accompany the TV presentations. These manuals are outstanding examples of carefully developed course objectives, appropriate assignments, supplementary readings, and preparation for specific evaluation. The availability of the TV materials through WGBH and the potential availability of these outstanding study guides makes the Chicago TV College program a very important resource.

Other program sources for WGBH include several from Sunrise Semester courses prepared by the Washington Square College of Arts and Science of New York University; the Great Plains National Instructional Television Center (which provided full-year courses in such fields as *Americans from Africa: A History*, and *A Programmed Introduction to Economic Analysis*); the State University of New York (complete course on the *Rise of the American Nation*, for example); and WSBE-TV in Providence, R.I. This extensive group of college courses represents great potential educational resources for the Massachusetts State College System.

Finally, it is important to note that the production facilities at WGBH are quite extensive and that some of the best of the college courses are available directly from the station. It has been well described, again by Edith Efron, in the following words: "It is an astonishingly creative and innovative station, intensely sensitive to many aspects of Boston life. . . . the working atmosphere is dominated by a concern for quality, an interest in innovation and the kind of fun that is always present when people love their work—and assume a reasonable intelligence in their audience."⁶

Faculty Attitudes toward External Degree Programs

In order to obtain information about the attitudes and opinions of administrators within the State College System, an opinion survey was administered. A questionnaire was prepared and nine copies were distributed to each of the 11 colleges. The distribution of questionnaires within each college was carried out by the individual college representatives (contact persons). No attempt at random distribution was made.

Forty-eight persons from the various colleges' faculties participated in the survey. Of these, 8% (4) were college presidents or executive vice presidents, 19% (9) were academic deans, 8% (4) were deans of graduate studies, 8% (4) were directors of continuing studies, 8% (4) were chairmen of college curriculum committees, 19% (9) were nonacademic deans, 13% (6) were directors of admissions, and 17% (8) were classified as "other." This "other" group was composed of a wide range of college teacher-administrators such as assistant to the president, part-time director of undergraduate studies, associate director of continuing studies, and associate dean of admissions. Copies of the questionnaire and the actual response frequency counts are included in Appendix III. A general description of the survey results follows:

Overview

The overwhelming majority of those who participated in the study (94%) agreed that the general concept of the External Degree is a good one. In addition, the participants were asked to indicate at what degree level or levels the External Degree should be made available. Most felt that External Degrees should be offered at the associate and bachelor's degree levels, (75% and 85%, respectively), while only small percentages favored External Degree offerings at the master's or CAGS levels (29% and 19%, respectively).

⁶Edith Efron, op. cit., p. 40.

Cooperative Degree Programs

Participants in this survey were asked to express their opinions concerning the feasibility of Cooperative External Degree Programs with other institutions of higher learning. Of those surveyed, 83% felt that, when feasible, the External Degree Program should be offered jointly by several colleges as opposed to institutions operating separately. The following is a breakdown of how they felt about Cooperative Programs with institutions other than those belonging to the Massachusetts State College System:

- 92% favored cooperation with public colleges.
- 85% favored cooperation with public community colleges.
- 85% favored cooperation with public universities.
- 46% favored cooperation with private 4-year colleges.
- 40% favored cooperation with private 2-year colleges.
- 71% favored cooperation with institutions in nearby states.

Administrative Structure and Finance

In regard to general administration, there was a fairly even split between administrators favoring that the External Degree Program be administered under presently existing mechanisms (40%) and those favoring that some new methods be instituted (50%).

Opinion seemed more definite in questions concerning finance where 42% felt the role of state financing in the External Degree Program should be similar to the Regular College Plan, 31% favored the establishment of some new plan, and only 21% felt that the current Continuing Studies finance plan should be continued. This trend was further supported by that fact that 75% of those surveyed preferred that External Degree faculty be considered part of the regular college faculty rather than being considered Continuing Studies faculty.

Dissatisfaction with the current method of financing the Continuing Studies Program was further reflected in administrator responses to questions concerning tuition plans. Forty-two percent felt that the Current Regular College Tuition Plan should be used for *full-time* External Degree students. Thirty-five percent favored the establishment of some new tuition plan while only 23% favored retaining the current plan. Stated another way, 77% indicated their preference for a tuition plan other than the current Continuing Studies Plan.

In regard to the tuition plan for *part-time* External Degree students, only 15% favored the current Continuing Studies Plan while 38% favored the current plan BUT stipulated that the total tuition should not exceed that of the full-time Regular College Program. Forty percent indicated their preference for some new tuition plan similar to the current Regular College Program.

Potential Student Population

The types of clientele currently not being reached by the Massachusetts State College System which could be reached through an External Degree Program were seen by those surveyed as follows:

98% felt potential students who must work full-time to support families could be reached in this way.

77% felt mothers/housewives could be better reached in this way.

75% felt college dropouts could be better reached in this way.

56% felt people over 22 years of age could be better reached in this way.

54% felt students now enrolled in Continuing Studies Programs could be better reached in this way.

The participants were asked to indicate what types of people (categorized by work type) they felt would be most or least attracted to External Degree Programs. The following table indicates the types felt to be most and least attracted and the percentage of administrators surveyed that indicated each given type.

Most Attracted		Least Attracted	
Type	% Indicating This Type	Type	% Indicating This Type
Technicians	56%	Medical*	45%*
Social Services	52%	Labor Trades	35%
Management	40%	Sales	13%
Clerical	33%	Management	13%

*It was obvious from the responses to the questionnaire that most administrators interpreted "medical" as meaning a program training doctors only, as opposed to the more liberal use of the term "medical" including all areas, i.e., medical, paramedical, and health science-related fields.

Potential Curricular Offerings

The respondents were also asked to indicate which curricular programs should be most and least emphasized in an External Degree Program. The following table indicates their feeling on this question.

Most Emphasis		Least Emphasis	
Curricular Offering	% Indicating Importance of This Offering	Curricular Offering	% Indicating Importance of This Offering
Liberal Arts-Nonscience	65%	Medical	63%
Social Services	54%	Education	42%
Business Administration	46%	Legal	35%
Vocational Education	42%	Liberal Arts-Science	27%

Admissions and Assignment of Credit

From those surveyed, 52% felt that the general admission requirements for the External Degree Program should be definite but less rigorous than present State College requirements. Twenty-one percent felt that admission requirements should be similar to the present State College requirements, and 17% felt there should be *no* general admission requirements.

The most important criteria to be included in an admissions policy for an External Degree Program were seen to be:

A high school diploma (by 69% of the participants); at least a year of work experience (by 27%); and acceptable scores on college level entrance tests, such as The American College Testing Program or the College Entrance Examination Board.

The External Degree Program lends itself to a number of alternate methods of obtaining course credit. An overwhelming majority of those surveyed felt that

credit by examination was an acceptable method of obtaining course credit, although other preferences were also indicated, as follows:

- 94% were in favor of credit by examination.
- 77% were in favor of specifically designed independent courses.
- 69% were in favor of credit for degree related on-the-job-training.
- 69% were in favor of programmed instruction courses.
- 63% were in favor of coursework by television/radio.
- 60% were in favor of computer assisted program courses.
- 46% were in favor of credit for previous work experience.

In addition, 88% felt that credit for External Degree Program courses should be transferable to Regular Degree Programs if the course content was similar.

Counseling

External Degree Programs tend to place somewhat different demands on student counselors and advisers. In this light, those surveyed were asked what role they thought counseling should play in such a program. Seventy-three percent felt that academic advisers in External Degree Programs have a more significant role than academic advisers in a Regular Degree Program. They further felt that counseling services should be an integral part of the External Degree Program in the following counselor areas:

- 94% academic counseling
- 85% vocational (or career) counseling
- 46% personal counseling.

Status of the External Degree Program

Seventy-five percent of the survey participants felt that an External Degree Program would not carry the same prestige as the Regular Degree Program initially, although 75% felt that it *should*. (Those who felt it should were not necessarily the same participants who felt it would not carry the same prestige.) Sixty percent did feel that an External Degree Program would eventually carry the same prestige as the Regular Degree Programs. It was interesting to note that it was primarily the nonacademic deans who were concerned that External Degree Programs would not eventually carry the same prestige as regular programs. The academic deans, curriculum committee chairmen, and others involved in the academic aspects of administration felt that the External Degree Program should, and eventually would, carry the same prestige as the regular program.

Chapter 7

RECOMMENDATIONS REGARDING CONTINUING EDUCATION IN THE MASSACHUSETTS STATE COLLEGE SYSTEM

The Willis-Harrington report of December 1964 on *Quality Education for Massachusetts*, and the resulting legislation, established the functions of the University of Massachusetts, the technological institutes, the State Colleges, and the regional community colleges. Each institution was expected to enjoy fiscal autonomy within the limits of its functions, purpose, and program as established by the General Court on the basis of the report or subsequent change by the Board of Higher Education. The responsibilities of the State Colleges were spelled out as follows:

The state colleges shall provide educational programs, research, extension and continuing educational services in the liberal, fine and applied arts and sciences and other related disciplines through the master's degree level. They may offer doctoral programs in cooperation with the University of Massachusetts under authority granted by the board of higher education, concurred in by the board of trustees of said university and of said state colleges. They shall provide a major emphasis on the preparation of teachers and other professional educational personnel.¹

Continuing Education is specifically provided for, as well as extension activities, at the Bachelor's and Master's Degrees levels in the various fields of study. Since extension can be subsumed within Continuing Education, the report and its recommendations are based on this broad definition of Continuing Education. Although joint doctoral programs with the University of Massachusetts were authorized, none has been approved to date and doctoral work in Continuing Education in the State Colleges is not considered in this report.

At the present time a proposal is before the Board of Higher Education for the establishment of a "University of the Commonwealth" with the proposed

¹General Laws Relating to Education, The Commonwealth of Massachusetts Department of Education, 1966.

external degree functions which are an important although limited part of a total program of Continuing Education. An interim planning group chaired by the new Chancellor of the Board of Higher Education has been investigating such an organized program for granting external degrees (1) based on the establishment of a new model for learning and (2) outside of traditional classroom patterns. As a consequence, our recommendations involving an "Open College" program with alternate or external degrees are proposed in a way which would fit within a comprehensive plan developed by the Board of Higher Education and based on the legally assigned functions of the community colleges, the State Colleges, the technological institutes, and the University of Massachusetts.

In fact, the recommendations which follow are designed to fit within an even broader context which potentially could be even more important to the program of the Open University of the United Kingdom. The United Kingdom of Great Britain and Northern Ireland covers 94,000 square miles and has a population of 55 million. The six states of New England have a total population of under 12 million, living in approximately 66,000 square miles. Thus, the United Kingdom is much more densely populated, with five times as many people in only half again as much space. If New York is added to New England, the population is approximately 30 million people, slightly more than one-half of the United Kingdom but living in 116,000 square miles, slightly more than the United Kingdom. Thus, some of the principles of organization and methods of instructional planning and distribution used in the Open University of the United Kingdom may be useful for consideration by this entire group of states.

The recommendations are divided into two parts, (1) those which apply to the Massachusetts State College System as a whole and to the Central Office in particular, and (2) those which pertain specifically to the individual State Colleges, both general and specialized. Although recommendations are made for specific different responsibilities, all of the recommendations are based on the concept that Continuing Education is and will be a "cutting edge" for the educational enterprise, contributing in a critical and important way to lifelong learning, and to the continuing need for re-education and re-training of the professional labor force of the Commonwealth. There will be a continuing need for experimentation and a willingness to try out new forms of postsecondary educational organization and instructional systems, particularly those related to residence, time, and recognition of self-study and self-motivated learning. A variety of Continuing Education services must be provided, including (1) credit programs leading to degrees, (2) noncredit programs, (3) short courses, (4) conferences, (5) special workshops, and (6)

short-term institutes. With the thought that all of these varied efforts should be part of a planned, flexible program the following recommendations are designed to meet these goals.

System-Wide Recommendations

1. It is recommended that a new college be established as an "Open College" offering an alternate or external degree program as follows: (a) a Bachelor of Arts Degree in Liberal Studies or a Bachelor of Liberal Studies Degree, and (b) a Bachelor of Science Degree program in Business Administration. This college should provide both for the instruction-teaching function and the examining and degree-certifying function.
2. The "Open College" should be established with a minimal administrative staff, including a president, academic dean, admissions dean, and clerical staff as a beginning cadre. Staff from the existing colleges should be available for consultant activity, for preparation or evaluation of teaching-learning materials, evaluation of student achievement, and other essential work of the college—such activities normally to be on a reimbursed basis for time released from the home institution, but occasionally on an additional time basis.
3. It is recommended that the Massachusetts State College System arrange to collaborate with the following organizations in the development of this College: (1) The University of the State of New York for cooperation in the use of the New York State College Level Proficiency Exams, and (2) Station WGBH in its television and radio higher education courses. Joint committees should be established with both organizations to coordinate activities with each of the two agencies.
4. It is recommended that the "Open College" Bachelor of Arts Degree in Liberal Studies be patterned after the Bachelor of Liberal Studies program at the University of Oklahoma with four comprehensive year-courses, or the British Open University Honours BA Degree with eight comprehensive year-courses, and in either case with television broadcasts supplementing the intensive readings which are required in connection with the degree program. It is proposed that three year-courses be offered in the academic year 1972-73 in the fields of the Humanities, Social Sciences-History, and Natural Sciences. Teams of faculty members from the various State Colleges should be selected in the spring of 1972 to serve during the summer of 1972 to evaluate and adopt the most appropriate available television materials to be broadcast in connection with these three

year-courses. Extensive materials are available from the various sources already reported earlier and arrangements can be made with WGBH for their screening for the evaluation committees. Financing to support this effort can be secured from the special projects fund of the Central Offices.

5. As a possibility, a fourth course might be offered in mathematics. If this is offered, correspondence tutors will be needed in the Central Office for the regular grading of papers, or such correspondence tutors will be needed in the regional or local study centers. At the end of February 1972, the British Open University notified the investigators that their materials would be available for use in the United States although specific arrangements had not been made at that time. (The mathematics materials in particular, both TV and radio programs, plus correspondence lessons might be very good, and present little language difficulty in the field of mathematics.)
6. It is recommended that the "Open College" operate through regional centers surrounding each of the general colleges, including one in Hyannis. Each region should be responsible for establishing and coordinating a number of local study centers which would be open late afternoons, evenings, and Saturdays, with the following services: (a) counselors to interview students and help with the problems of admission and organization, (b) academic tutors on a part-time basis selected for capability in the three fields of study being offered and the concentration of students taking courses in a given region, (c) television receivers and playback equipment for reception and restudy of the TV lessons, and (d) arrangements for the giving of examinations and their grading or their transmission to the regional or central office of the College for such purpose.
7. In addition to offering alternate degree programs through an "Open College," it is recommended that the statewide system develop a residential center in a central location for short-term institutes and workshops which, by their nature, are better conducted under a residential program, comparable to the Kellogg Centers for Continuation Studies. This center should be separated administratively from an "Open College." However, the Director of such a center also should be responsible to the same chief statewide academic official. An advisory committee for such a center should be established with representation from the various Colleges. This committee should make recommendations to the Provost regarding

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the operation of such a center and assist in the development of guidelines for its development. It should be self-supporting financially, after small appropriations for planning for the initial program and buildings.

8. It is recommended that the information system in the Central Office be expanded to include a central record-keeping function for continuing education efforts of the various Colleges. This is desirable in order that their widespread and valuable activities can be recognized and properly disseminated to the citizens and officials of the Commonwealth.
9. In the long run, it is recommended that the statewide offices of Continuing Education, the "Open College," and the Residential Continuation Center be built together in an appropriate location. An analysis of existing lands available to the Massachusetts State College System indicates that space at the present Central Office or at Boston State College would be too limited and unsatisfactory for this purpose. It is recommended that the property at Dover, recently approved for the Massachusetts College of Art, be carefully examined to see if some space of this property could be made available for centralizing all of these facilities in one location. Since it is quite possible that facilities of this type could be self-amortizing, it is further recommended that the possibility of building under the State College Building Authority, as established in Chapter 73, be carefully and thoroughly examined. The sooner such a Center can be established, the better will be the development of the program. In the meantime, it may be desirable to establish a temporary center at Worcester, with a satellite at Westfield, if television production and dissemination are desirable from these two locations as a supplement to the facilities of WGBH.

Continuing Education Recommendations for Each of the Colleges

The following recommendations are based on these promises. First, the State Department of Education and the community colleges will take care of need in the Commonwealth for adult basic education, adult civic education, civil defense education, including personal and family survival, and the Massachusetts High School Equivalency Certification Program. According to the Levin-Slavet report, there are approximately 1.3 million people over 17 years of age without a 12th grade education. Although only 4,000 adults a year have been certified in past years for high school equivalency, and the need is great in this area, this function is not assigned to the State Colleges, and therefore should be ignored. For many students needing this type of

background, community colleges may be the best entry point for non-traditional students desiring to pursue certificate or degree programs.

Second, the report assumes that most of the current Continuing Studies Programs will be funded as part of the Regular Degree Programs, in accordance with recommendations in Chapter 4. This will completely separate the funding of regular undergraduate and graduate education from Continuing Education, even though much of it is now financed through Continuing Studies.

The recommendations regarding Continuing Education are as follows:

1. On each College campus a basic staff for the Division of Continuing Education should be provided from the "01" account of the state maintenance budget. Some of these positions are currently funded in this way for the existing Continuing Studies Program (see Chapter 3). Those institutions which currently have a Dean of Continuing Education funded in the "01" account, plus other staff and clerical assistance, should be continued. Each additional College should be provided with comparable staff to organize, plan, and direct this vital state program.
2. The Division of Continuing Education should be headed by a Dean who is responsible either to the Academic Vice President or the President of the College. This Division should be responsible for "credit" work offered off-campus on a self-supported basis and for all noncredit work offered at the institution, whether on-campus or off-campus. If the state funds are not forthcoming to support the summer session, regular college undergraduate and graduate programs (see Chapter 4, Option II), and they are conducted on a self-support basis, they should be assigned to the Division of Continuing Education for administration and control.
3. It is recommended that the Colleges each request state funds from the regular maintenance budget, perhaps 1% of the yearly instructional budget, for a small innovation and experimentation fund. One-half of this money should be used by the Division of Continuing Education for developing special workshops, short courses, or even off-campus credit courses which are needed in the immediate service area of the College.
4. It is recommended that each College establish a day care and evening care center primarily for children of working mothers. Only in this way can equal opportunity for Continuing Education be made available to many women and a few men who desire it. Funds should be secured from federal

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or state agencies involved in this area of equal opportunity, using self-support, fee-oriented care centers only as a last resort.

5. It is recommended that the Division of Continuing Education on each College campus be responsible for the regional coordination of the "Open College" program and for the administration and operation of the dispersed local study centers. In both the reports on the British Open University and discussion with students in the Massachusetts State Colleges during the investigative part of this study, students indicated a strong desire for the opportunity to meet and discuss with other students. This mutual support from fellow students could be critical to the success of the "Open College." Proper coordination and operation of the local study centers by each of the Colleges could be an important and critical factor in the success of the program. The Dean of Continuing Education at each College should be in an advantageous position to arrange for the facilities, hire good counselors and tutors, and administer this part of the program.
6. It is recommended that the Division of Continuing Education operate a subunit of the "Open College" central records system, including initial data for guidance of students of the area. In addition, records should be kept of students taking noncredit courses (including appropriate Certification of Continuing Education Units to the Central Statewide Office and the National Registry) and requests for special workshops, conferences, and institutes needed within the specific service area of the college. (Courses taken for credit in the Division of Continuing Education should be recorded in the Central Admissions Office of the College along with any other degree credit courses taken in the regular program of the College, on either a part-time or full-time basis.)
7. It is recommended that the Division of Continuing Education be assigned the responsibility of community service activity in the local, regional area surrounding the College, including community development activities such as the current emphasis on the training of day care workers, avocational and leisure time programs, community cultural and enrichment activities, noncredit part-time professional improvement programs, consultant services to the community, and development of community forums. The Division of Continuing Education should cooperate with other units on the campus in providing combined services to the students and the residents of the region, such as concerts, lectures, films, art shows, forums, and musical programs. On some campuses it will be desirable to coordinate in the Division of Continuing Education all of the multiple activities of the types previously listed which use campus facilities. An office which can

coordinate all arrangements for meeting rooms and auditoriums, publicity, audiovisual equipment, collection of admissions, and employment of part-time personnel can be a boon to the diverse groups needing such assistance. In coordinating community service activities, the Division of Continuing Education can provide an important and critical service.

8. It is recommended that all operations of the Continuing Education program (with the exception of the state-supported staff and funds for innovation) be on a full-cost basis to the student, unless special grant funds are secured to pay the cost. It is also recommended that all Continuing Education funds be established on a revolving trust fund basis and administered at the local College.

All of the above recommendations fit the established functions of the State Colleges, and dovetail with the assigned functions of the other public higher education institutions. In the master's degree areas the State Colleges should be ready to develop programs of Continuing Education in the next few years in cooperation with, or as a supplement to, the other public institutions charged with offering the master's degree. The University of Massachusetts alone should undoubtedly conduct any doctoral study which is carried out as a part of an external degree program in Continuing Education.

The needs of the Commonwealth of Massachusetts for professionally capable manpower were clearly spelled out in Chapter 1. A well-educated citizenry is critical in the solving of current and future economic and social problems. In November 1971, former Senator Wayne Morse, Chairman of the National Commission on the Future of State Colleges and Universities, stated

... it is in the interest of the American taxpayer and the long time security and survival of our country that through our educational system at all levels we develop to the maximum extent possible the potential brain power and skills of the youth of each generation. An adequately financed education system in all states will always repay many times over into the local, state, and federal treasuries the costs of the education of each generation of young people. This is true because of their increased lifetime earning power if not denied maximum education opportunities.²

To this the investigators would add only this—it is also true for adults of this generation.

²Address to the First General Session of the Annual Meeting of the American Association of State Colleges and Universities, Denver, Colorado, November 8, 1971.

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In conclusion, it is appropriate to reiterate the final comment with which the Willis-Harrington Report closed, emphasizing the need for "An Investment in the People of the Commonwealth," as follows:

The thread that runs throughout this report and particularly through thinking of the Commission is that of improvement—improvement in educational opportunity, improvement in equality, improvement in management, and in coordination. This improvement is required at all levels of organization and instruction from kindergarten through higher education.

More money is needed—a great deal more money. For 1965-66 an additional 91 million dollars will be required to provide for full payment on the state aid formula; another 7 million dollars will be required for categorical and incentive aid; and an additional 25 million dollars will be required to provide for improvement in higher education and in expanded scholarship programs. These expenditures for quality education will do much to help restore education in Massachusetts to the level of preeminence envisioned by Horace Mann and demanded even more urgently by today's society.

During the entire conduct of this study, the investigators have been deeply conscious of this charge. All of the above recommendations are made with the desire to assist in the achievement of these goals.

Appendix I

MASSACHUSETTS STATE COLLEGE SYSTEM PROGRAM OF CONTINUING STUDIES

A.

Policy of Free Tuition for Veterans (Vietnam)

Chapter 601 of the Acts of 1966 established a program of exemption from tuition for veterans who served in Vietnam and whose service in Vietnam was credited to the Commonwealth.

Chapter 480 of the Acts of 1968 removed the restriction of service "in Vietnam" and authorizes the issuance of a certificate of exemption from tuition to any Vietnam veteran, as defined in Section 7 of Chapter 4 of the General Laws, as most recently amended by Chapter 531 of the Acts of 1968, whose service was credited to the Commonwealth, and who is deemed qualified to attend a state institution of higher education in the Commonwealth.

This law became effective with the beginning of the academic year 1968-69. It is not retroactive.

Definition of "Vietnam Veteran"

(as defined in Section 7 of Chapter 4, General Laws,
as amended by Chapter 531 of the Acts of 1968)

Section 1. Clause forty-third of Section 7 of Chapter 4 of the General Laws is hereby amended by striking out the eighth paragraph, as most recently amended by Chapter 437 of the Acts of 1967, and inserting in place thereof the following paragraph:

"Vietnam veteran" shall mean (1) any person who performed such wartime service during the period commencing August fifth, nineteen hundred and sixty-four and ending

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on a date to be determined by presidential proclamation and concurrent resolution of the congress of the United States or (2) any person who served at least one hundred and eighty days of active service in the armed forces of the United States during the period between February first, nineteen hundred and fifty-five and August fourth, nineteen hundred and sixty-four, except that any such person who served in said armed forces during said period and was awarded a service-connected disability or a Purple Heart, or who died in said service under conditions other than dishonorable, shall be deemed to be a veteran notwithstanding his failure to complete one hundred and eighty days of active service.

Section 2. Said clause forty-third of said section 7 of said Chapter 4 is hereby further amended by adding the following paragraph:

"Active service in the armed forces," as used in this clause shall not include active duty for training in the army national guard or air national guard or active duty for training as a reservist in the armed forces of the United States.

1. The service of said veteran must be credited to the Commonwealth of Massachusetts.
2. A Certificate of Exemption from tuition will be issued by the Department of Education to a veteran who meets the requirements of the law.
3. The Certificate of Exemption shall entitle the veteran to attend any such institution free of tuition but shall remain in effect—
 - a. Only during the academic year for which it is issued. The certificate shall be renewed annually prior to the start of each academic year.
 - b. Assistance under this act shall continue only during such time as the student remains in good standing at the institution in which he is enrolled.
 - c. In no event shall any student receive the benefits provided by this act for more than 4 years.
 - d. No educational assistance shall be afforded an eligible Vietnam veteran for any academic year commencing more than 8 years after (1) his last discharge or release from active duty or (2) the effective date of this act, whichever is later.
 - e. An academic year customarily considered to be standard two-semester (September to June) period, full-time, day or evening. However,

adjustments are approvable for summer sessions if a part of a plan for continuing education. Single course enrollments having no connection with overall planned higher education program are not approvable.

4. A photostat of discharge papers (DD214) should be sent to the State Adjutant General, Room 184, State House for a certification that he meets the requirements of Section 7, Chapter 4, General Laws as amended by Chapter 531 of the Acts of 1968, and that his service is credited to the Commonwealth.
5. A statement from the Dean of Admissions or Registrar of the state institution certifying that the veteran is qualified and eligible for admission must be filed with the Department.

This statement should include information as to whether the veteran is enrolled in full-time day or evening sessions or in a summer session if it is an integral part of the academic year.

6. The statements from the Adjutant General and from the institution of higher education, together with the veteran's present home address, should be forwarded to the Commissioner of Education, 182 Tremont Street, Boston.

B.

Policy of Free Tuition for Veterans (Excluding Vietnam)

The following free tuition policy is in effect in the Massachusetts State College System, Program of Continuing Studies based on Chapter 69—Sections 7 and 7A of the General Laws, and further amended to include Korea Veterans by Chapter 403, Section 1—Acts of 1954.

Any resident of Massachusetts who has served in any branch of the armed services for at least 90 days, one of which must have been served either between September 16, 1940, and December 31, 1946, or between June 25, 1950, and January 31, 1955, and who has a discharge other than dishonorable may enroll without charge for instruction in any course here offered within the established limitation of 120 semester hours. To establish his eligibility, the veteran must present his discharge (or a photostatic copy)

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or certificate of satisfactory service in the case of officers, together with proof of residence, in advance of the opening date of class meeting.

Any disabled veteran, who has a service-connected disability and who is a present resident of Massachusetts, may take College Extension courses without charge. There is no limit to the number of courses which may be taken by disabled veterans. The disabled veteran should obtain a certificate of disability from the Veterans Administration and have it recorded and filed at the College.

Also entitled to free courses are residents of the Commonwealth while serving in the military and naval forces of the United States and stationed in Massachusetts.

C.

Policy of Free Tuition for Nonprofessional Employees

Excerpt from minutes of Board of Trustees meeting of September 19, 1967.

Upon recommendation of the Committee on Faculty and Personnel, and on motion duly made and seconded, it was

VOTED:

That, effective September 1, 1967, nonprofessional employees at the Division and State Colleges, may take courses at the State Colleges, without cost, with the following limitations:

All such individuals must have been employed by the Commonwealth for at least 1 year.

Courses must be taken outside the normal working hours.

All prerequisites for any of the courses taken must be fulfilled.

D.

Policy on Special Tuition Fees for Undergraduate Evening Students

Excerpt from minutes—Voted by Board of Trustees, October 29, 1965.

Tuition Fees

To authorize the admittance of students to undergraduate courses as a part of separate undergraduate programs within the Program of Continuing Studies or any other existing

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program, at an enrollment rate of \$10.00 per semester hour, not to exceed a total of \$100 per term or per semester, exclusive of registration and other regular fees, effective September 1, 1965; the programs for which this rate applies will be determined by the Director of the Division of State Colleges.

E.

**Policy of Free Tuition for Faculty in Other Public
Colleges and Universities**

Excerpt from the minutes of the meeting of the Board of Trustees dated December 12, 1968.

On motion duly made and seconded, it was

VOTED:

That the Board of Trustees of the Massachusetts State Colleges communicate with the Boards of Trustees of the University of Massachusetts, Community Colleges, Lowell Technological Institute and Southeastern Massachusetts Technological Institute, indicating that it would consider a request from these Boards which would permit their faculty to take courses through the Continuing Studies Program at the State Colleges without tuition charge.

(The request from other Boards was received and approved at the January 1969 meeting of the Board of Trustees. Source: members of the staff of the System office.)

F.

**Policy on Tuition Vouchers for Cooperating Teachers in
the Student Teaching Supervision Program**

**I. Meeting of the Board of Trustees—January 21, 1966
minutes of the Board of Trustees**

Teacher Vouchers

On motion duly made and seconded, it was

VOTED:

To adopt a pilot program at those colleges able to finance such a plan through the Continuing Studies Program which would allow cooperating teachers to take a course in the Continuing Studies Program free of charge, said program to terminate on June 30, 1966. The course is restricted to the teachers actually performing the services of cooperating teachers and must be taken prior to June 30, 1966. No college may offer more than 50 free courses.

II. Excerpt from minutes of the Presidents' Meeting—March 4, 1966

Pilot Programs in Student Teaching Vouchers

Dr. Guindon reported on the Board's action which allowed those colleges which are not in deficit under the Continuing Studies Program to give up to 50 vouchers which will allow one free course to be taken by those supervisory teachers who have had student teachers for this semester. The voucher is nontransferable and must be used by the teacher who did the actual supervision. Applications for refunds can be made by those teachers who are taking courses and have already paid. Since this is a pilot program there is a termination date of June 30.

III. Excerpt from minutes of the Presidents' Meeting—December 16, 1966

Transfer of Vouchers to the Student Teachers

On motion duly made and seconded, the Presidents

VOTED:

To reaffirm the action of the Board that student teaching vouchers are nontransferable.

IV. Meeting of the Board of Trustees—November 21, 1967

Dr. Guindon indicated that previously such vouchers were limited to those teachers who accepted a student teacher for use at the college by which it was issued.

On motion duly made and seconded, it was

VOTED:

To allow transfer of student teacher vouchers to other members of the particular public school system if the cooperating teacher who accepted the State College student teacher did not wish to use it, this approval to be for a 1-year period and subject to approval by the Board of Presidents.

V. Excerpt from minutes of the Presidents' Meeting—November 27, 1967

Practice Teaching Vouchers

The Presidents were advised of the vote of the Board of Trustees relative to practice teaching vouchers. The Presidents felt that such vouchers should not be transferable to other colleges, but remain at the individual college.

On motion duly made and seconded, it was

VOTED:

That the student teacher voucher be transferred within the school system if the teacher to whom it was assigned does not wish to make use of it. It is not transferable to other colleges.

Appendix II

SOURCES OF TRAINED MANPOWER SUPPLY— THE MASSACHUSETTS STATE COLLEGE SYSTEM

Manpower Requirement Designations are taken directly from *Massachusetts Manpower Requirements to 1975*, Boston, Massachusetts, October 1971, Table VI, pp. 45-48. Enrollment figures and State College System Program Designations were obtained from individual colleges by survey in December of 1971.

Manpower Requirement Designations	Programs in the Massachusetts State College System	
All Teachers—All undergraduates enrolled in programs of teaching orientation.		
	<u>Undergraduates</u>	<u>Graduates</u>
Boston	1,815	0
Bridgewater	3,155	0
Fitchburg	2,611	0
Framingham	1,009	0
Lowell	423	0
College of Art	199	0
North Adams	1,025	0
Salem	2,421	0
Westfield	1,240	0
Worcester	1,747	0
	15,645	0

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Elementary Teachers—All undergraduates currently enrolled in programs of elementary education.

	<u>Undergraduates</u>	<u>Graduates</u>
Boston	651	0
Bridgewater	1,477	0
Fitchburg	637	0
Framingham	507	0
Lowell	279	0
North Adams	482	0
Salem	992	0
Westfield	640	0
Worcester	617	0
	<hr/> 6,282	<hr/> 0

Other Teachers—All undergraduates currently enrolled in programs of teaching orientation *minus* those in elementary education.

	<u>Undergraduates</u>	<u>Graduates</u>
Boston	1,164	0
Bridgewater	1,678	0
Fitchburg	1,974	0
Framingham	502	0
Lowell	144	0
College of Art	199	0
North Adams	543	0
Salem	1,429	0
Westfield	600	0
Worcester	1,130	0
	<hr/> 9,363	<hr/> 0

APPENDIX II—SOURCES OF TRAINED MANPOWER 207

Chemists—All undergraduates enrolled in “nonteaching orientation” chemistry.

	<u>Undergraduates</u>	<u>Graduates</u>
Boston	30	0
Bridgewater	13	0
Fitchburg	2	0
Framingham	22	0
North Adams	8	0
Salem	11	0
Worcester	8	0
	<hr/> 94	<hr/> 0

Biological Scientists—All undergraduates enrolled in “nonteaching orientation” biology.

	<u>Undergraduates</u>	<u>Graduates</u>
Boston	124	0
Bridgewater	70	0
Fitchburg	28	0
Lowell	54	0
North Adams	20	0
Salem	76	0
Worcester	65	0
	<hr/> 437	<hr/> 0

Geologists—All undergraduates enrolled in “nonteaching orientation” chemistry-geology.

	<u>Undergraduates</u>	<u>Graduates</u>
Bridgewater	<hr/> 1	<hr/> 0
	1	0

208 NEW DIMENSIONS OF CONTINUING STUDIES

Mathematicians—All undergraduates enrolled in “nonteaching orientation” mathematics.

	<u>Undergraduates</u>	<u>Graduates</u>
Boston	188	0
Bridgewater	25	0
Framingham	79	0
Lowell	79	0
North Adams	1	0
Salem	140	0
Westfield	94	0
Worcester	47	0
	<hr/> 653	<hr/> 0

Other Natural Scientists—All undergraduates enrolled in “nonteaching orientation” programs as indicated.

<u>Earth Science</u>	<u>Undergraduates</u>	<u>Graduates</u>
Boston	38	0
Bridgewater	16	0
Framingham	16	0
Lowell	1	0
Salem	15	0

Natural Science

Boston	20	0
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General Science

Westfield	32	0
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<i>Total Other Natural Scientists</i>	138	0
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Engineers, Technical

	<u>Undergraduates</u>	<u>Graduates</u>
Fitchburg	613	0
Maritime	333	0
	<hr/> 946	<hr/> 0

APPENDIX II—SOURCES OF TRAINED MANPOWER 209

Physicists—All undergraduates enrolled in “nonteaching orientation” physics.

	<u>Undergraduates</u>	<u>Graduates</u>
Boston	7	0
Bridgewater	7	0
Fitchburg	2	0
Worcester	6	0
	<hr/> 22	<hr/> 0

Dietitians and Nutritionists—All graduate students enrolled in food and nutrition masters programs.

	<u>Undergraduates</u>	<u>Graduates</u>
Framingham	0	22
	<hr/> 0	<hr/> 22

Nurses (Professional)—All undergraduates enrolled in 4-year nursing programs.

	<u>Undergraduates</u>	<u>Graduates</u>
Lowell	204	0
Salem	138	0
	<hr/> 342	<hr/> 0

Psychologists—All undergraduates enrolled in “nonteaching orientation” psychology and graduate students enrolled in school psychology.

	<u>Undergraduates</u>	<u>Graduates</u>
Boston	264	0
Bridgewater	211	0
Fitchburg	7	42
Framingham	126	0
Lowell	141	0
North Adams	110	0
Salem	59	0
Westfield	49	20
Worcester	118	0
	<hr/> 1,085	<hr/> 62
Total	1,147	

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Technicians: Medical, Dental—All undergraduates enrolled in medical technology.

	<u>Undergraduates</u>	<u>Graduates</u>
Framingham	78	0
Lowell	26	0
North Adams	48	0
	<hr/> 152	<hr/> 0

Economists—All undergraduates enrolled in "nonteaching orientation" economics.

	<u>Undergraduates</u>	<u>Graduates</u>
Boston	80	0
Salem	9	0
Worcester	23	0
	<hr/> 112	<hr/> 0

Other Social Scientists—All undergraduates enrolled in "nonteaching orientation" Social Science.

	<u>Undergraduates</u>	<u>Graduates</u>
Bridgewater	21	0
Westfield	63	0
	<hr/> 84	<hr/> 0

APPENDIX II—SOURCES OF TRAINED MANPOWER 211

Workers in Arts and Art Entertainment—All undergraduates enrolled in “nonteaching orientation” art and fine arts.

<u>Art</u>	<u>Undergraduates</u>	<u>Graduates</u>
Framingham	73	0
Lowell	43	0
Westfield	43	0
<u>Fine Arts</u>		
College of Art		
Upper Class	250	0
Frosh	275	0
	684	0

Designers except Design Draftsmen—All undergraduates enrolled in “non-teaching orientation” design.

	<u>Undergraduates</u>	<u>Graduates</u>
College of Art	186	0
	186	0

Librarians—All graduate students enrolled in library science or librarianship.

	<u>Undergraduates</u>	<u>Graduates</u>
Bridgewater	0	35
Framingham	0	NA
Salem	0	15
	0	54

Photographers—No enrollment figures are available on photography majors but they are subsumed in the “Fine Arts” category listed above.

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Social and Welfare Workers—All undergraduates enrolled in “nonteaching orientation” Sociology.

	<u>Undergraduates</u>	<u>Graduates</u>
Boston State	210	0
Bridgewater	180	0
Lowell	103	0
Worcester	103	0
	<hr/> 596	<hr/> 0

Managers, Officials, Proprietors, N.E.C.—All undergraduates enrolled in business administration.

	<u>Undergraduates</u>	<u>Graduates</u>
North Adams	186	0
Salem	685	0
	<hr/> 871	<hr/> 0

Nurses (Practical)—All undergraduates enrolled in 1-year nursing programs.

	<u>Undergraduates</u>	<u>Graduates</u>
Worcester (1-yr. program)	188	0
	<hr/> 188	<hr/> 0

Law Enforcement—All undergraduates enrolled in “nonteaching orientation” Law Enforcement.

	<u>Undergraduates</u>	<u>Graduates</u>
Boston State	190	0
Westfield	28	0
	<hr/> 218	<hr/> 0

Appendix III

EXTERNAL DEGREE SURVEY SUMMARY DATA

PART A

Administrative Information

Directions: Place an "X" on the line to the right of the title that best describes your educational affiliation. Place more than one "X" if necessary. (Note: this information is optional.)

	<i>N</i>	<i>Percent of total N</i>
College President	2	4%
Academic Dean	9	19%
Dean of Graduate Studies	4	8%
Director of Continuing Studies	4	8%
Nonacademic Dean	9	19%
Director of Admissions	6	13%
Other (Specify)	14	29%
TOTALS	48	100%

PART B

External Degree Survey Objective Items

Directions: For each of the following statements relevant to the external degree, please place an "X" in the box to the right of the response which best

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summarizes your feelings concerning that item. In addition, for each item which you believe an "X" does not adequately express your feelings, please comment under the corresponding item-number in Part C of this survey.

1. In general the concept of the External Degree is a good one.	Agree	45	94%
	Disagree	1	2%
2. If such an External Degree Program is implemented it should be limited to the (X more than one, if applicable.)	Associate Degree	36	75%
	Bachelor's Degree	41	85%
	Master's Degree	14	29%
	C.A.G.S. Degree	9	19%

NOTE: The following questions pertain to the *Undergraduate External Degree* ONLY:

3. When feasible, the program should be offered jointly by several colleges working together as opposed to institutions operating separately.	Agree	40	83%
	Disagree	6	13%
4. What types of institutions should be included in cooperative degree programs. (X more than one, if applicable.)	Public Colleges	44	92%
	Public Community Colleges	41	85%
	Public Universities	41	85%
	Private 4-year Colleges	22	46%
	Private 2-year Colleges	19	40%
	Private Universities	19	40%

APPENDIX III-EXTERNAL DEGREE SURVEY 215

5. When feasible, cooperative degree programs should be made with institutions in nearby states.	Agree	34	71%
	Disagree	11	23%
6. Such a program should be administered under presently existing administrative mechanisms as opposed to newly established ones.	Agree	19	40%
	Disagree	24	50%
7. Generally speaking, External Degree faculty should be considered part of the regular college faculty rather than as Continuing Studies Faculty (for purposes of salary, etc.).	Agree	35	73%
	Disagree	12	25%
8. The role of the state in financing the External Degree Program should be accomplished in a manner:	Similar to the current Day College Plan.	20	42%
	Similar to the current Continuing Studies Program.	10	21%
	A third system should be established. (Specify in Part C.)	15	31%
9. What type of tuition plan should be used for <i>full-time</i> external-degree students?	Current Day College Plan	20	42%
	Current Continuing Studies Plan.	11	23%
	A third system should be established. (Specify in Part C.)	17	35%

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10. What type of tuition plan should be used for <i>part-time</i> external degree students?	Current Continuing Studies Plan.	7	15%
	Current Continuing Studies Plan, BUT, total tuition should not exceed that of a full-time day student.	18	38%
	Other (Specify in Part C.)	19	40%
11. What clientele not now reached by the Massachusetts State College System could be reached through an External Degree Program? (X more than one, if applicable.)	No other.	1	2%
	People over 22 years of age.	27	56%
	Mothers/Housewives	37	77%
	College Dropouts	36	75%
	Students now enrolled as full-time day students in college.	11	23%
	Students now enrolled in Continuing Studies Programs.	26	54%
	Potential students who must work full-time to support families.	47	98%
	Other (Specify in Part C.)	6	13%

APPENDIX III-EXTERNAL DEGREE SURVEY 217

12. Of the listed work categories, which THREE do you think would represent people who would be MOST attracted to an External Degree Program? (X only three.)	Labor (trades)	15	31%
	Clerical	16	33%
	Sales	14	29%
	Management	19	40%
	Technicians	27	56%
	Medical	6	13%
	Social Services	25	52%
	Other (Please specify in Part C.)	4	8%
13. Of the listed work categories, which ONE do you think would represent people who would be the LEAST attracted to the External Degree Program? (One X only.)	Labor (Trades)	17	35%
	Clerical	3	6%
	Sales	6	13%
	Management	6	13%
	Technicians	0	0%
	Medical	22	46%
	Social Services	1	2%
	Other (Specify in Part C.)	1	2%
14. Which THREE of the following general subject areas should be MOST emphasized in an External Degree Program? (X only three.)	Education	8	17%
	Liberal Arts nonscience	31	65%
	Business Admin.	22	46%

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	Liberal Arts science	8	17%
	Legal	1	2%
	Medical	4	8%
	Social Services	26	54%
	Vocational Education	20	42%
	Other (Please specify in Part C.)	5	10%
15. Which TWO of the following general subject areas should receive the LEAST emphasis in an External Degree Program? (Place two Xs.)	Education	20	42%
	Liberal Arts nonscience	4	8%
	Liberal Arts science	13	27%
	Business Admin.	1	2%
	Legal	17	35%
	Medical	30	63%
	Social Services	1	2%
	Vocational Education	9	19%
	Other (Specify in Part C.)	0	0%
16. What general admission requirements do you feel would be most appropriate for such a program?	None	8	17%
	Similar to present State		

APPENDIX III-EXTERNAL DEGREE SURVEY 219

	College Re- quirements.	10	21%
	Definite require- ments, but <i>less</i> rigorous than present State College requirements.	25	52%
	Definite require- ments but more rigorous than present State College requirements.	2	4%
17. Which of the following criteria would you include in an admissions policy for an External Degree Program: (Place as many Xs as you wish.)	High School Degree	33	69%
	At least one year of college work.	3	6%
	Be currently employed.	4	8%
	At least one year of work experience.	13	27%
	At least three years of work experience.	6	13%
	Scores on college level entrance tests (e.g., CEEB, ACT).	11	23%

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	High school rank in class.	4	8%
	Other (Specify in Part C.)	6	13%
18. The following list contains some of the ways course credit can be obtained by External Degree Program students. Which of these do you feel should be used? (Place as many Xs as you wish.)	Credit by examination (CLEP).	45	94%
	Credit for previous work experience (e.g., licensed electrician).	22	46%
	Credit for degree related on-job training.	33	69%
	Course work by television/radio.	30	63%
	Computer assisted program courses.	29	60%
	Specifically designed independent courses.	37	77%
	Programmed instruction courses.	33	69%
	Correspondence courses.	29	60%
	Other (Specify in Part C.)	6	13%
19. Credit for External Degree Program courses should be transferable to Regular Degree Programs when the	Agree	42	88%
	Disagree	5	10%

APPENDIX III-EXTERNAL DEGREE SURVEY 221

course content is similar.

20. Academic advisers in an External Degree Program have a more significant role than academic advisers in a Regular Degree Program.	Agree	35	73%
	Disagree	11	23%
21. Which of the following counseling services should be an <i>integral</i> part of an External Degree Program?	Academic	45	94%
	Vocational or Career	41	85%
	Personal	22	46%
22. Do you feel that initially the External Degree Program will carry the same prestige as a Regular Degree Program?	Yes	11	23%
	No	36	75%
23. Do you feel that <i>eventually</i> the External Degree Program will carry the same prestige as a Regular Degree Program?	Yes	29	60%
	No	10	21%
24. Do you feel that an External Degree Program should carry the same prestige as a Regular Degree Program?	Yes	36	75%
	No	9	19%

BIBLIOGRAPHY

Alden, Vernon R., et al. *Report of the President's Committee on the Future University of Massachusetts*. Boston: The University of Massachusetts, December 1971.

Allen, James E. *An Open University/External Degree Program for Massachusetts*. Boston: Massachusetts Board of Higher Education, October 12, 1971.

American Association of State Colleges and Universities. *Issues and Alternatives in the Future of State Colleges and Universities*. Washington, D.C.: Author, November 1971.

American Association of State Colleges and Universities. *A Supplement to the Issues and Alternatives in the Future of State Colleges and Universities*. Washington, D.C.: Author, November 1971.

Anello, Michael, et al. *The People's Colleges: The State Colleges of Massachusetts*. Boston: Massachusetts Advisory Council on Education, August 1971.

Arbolino, Jack N. "A Plan for External Degrees," in *New Teaching, New Learning*. Washington, D.C.: American Association for Higher Education, 1971.

Arthur D. Little, Inc. "New England: An Economic Analysis." A report prepared for the New England Regional Commission, Cambridge, Massachusetts, November 1968.

Ashby, Eric. *Any Person, Any Study* (an essay on higher education in the United States). Berkeley, Calif.: Carnegie Commission on Higher Education, 1971.

Board of Higher Education. *New Horizons* (a report on student financial aid in the Commonwealth of Massachusetts). Boston: Author, 1967.

Board of Higher Education. *General Laws and Procedures Relating to Collegiate Authority*. Boston: Author, 1969.

224 NEW DIMENSIONS OF CONTINUING STUDIES

Board of Higher Education. *Higher Education Enrollment Study for Massachusetts* (a comparison of institutional estimates and projected enrollment trends for 1969-1975-1980). Boston: Author, January 1969.

Board of Higher Education. *Higher Education in the Boston Metropolitan Area*. Boston: Author, 1969.

Board of Higher Education. *Massachusetts Higher Education Profile* (an overview of characteristics, enrollment trends and facilities). Boston: Author, 1970.

Board of Higher Education. *The Pricing of Public Higher Education Services: Tuition and Fees*. Boston: Author, December 1970.

Board of Higher Education. *A Proposal for Regional Academic Consortia in Massachusetts*. Boston: Author, December 1970.

Board of Trustees. "Creation of a New Board of Trustees for the Massachusetts State Colleges." Board of Trustees, Massachusetts State Colleges, 1966.

Bouvier, Leon F. *Higher Education 1970-1990*. Washington, D.C.: Clearing-house for Federal Scientific and Technical Information, February 1970.

Bowen, Howard R., and Douglass, Gordon K. *Efficiency in Liberal Education*. New York: McGraw-Hill, 1971.

Bowker, Co., R. R. *Annual of Library and Book Trade Information*. New York: Author, 1970.

Boyden, Arthur Clarke. *The History of Bridgewater Normal School*. Bridgewater, Mass.: Bridgewater Normal Alumni Association, 1933.

Bretzfelder, Robert B., and Dallavalle, Q. Francis. "Total and Per Capita Personal Income by Regions and States, 1968." *Survey of Current Business*, August 1969, 49.

Bureau of Adult Education. *Adult Education Classes in Greater Boston*, (Fall-1971). Boston: Author, 1971.

Bureau of Adult Education. *Adult Education Classes in Greater Boston* (Spring-1972). Boston: Author, 1971.

- Bureau of Labor Statistics. *Massachusetts Manpower Requirements to 1975*. Occupational Research Department, Division of Employment Security, in cooperation with the U.S. Department of Labor Statistics, October, 1971.
- Carey, James T. *Forms and Forces in University Adult Education*. Chicago: Center for the Study of Liberal Education for Adults, 1961.
- Carnegie Commission on Higher Education. *A Chance to Learn* (an action agenda for equal opportunity in higher education). Berkeley, Calif.: Author, March 1970.
- Carnegie Commission on Higher Education. *A Digest of Reports & Recommendations* (December 1968-October 1971). Berkeley, Calif.: Author, October 1971.
- Carnegie Commission on Higher Education. *New Students and New Places*. Berkeley, Calif.: Author, October 1971.
- College and University Business. "Factors You Must Consider When Designing TV Studios." *College and University Business*, May 1968, 44(5).
- College Management. "Innovations, Part I: Three Year Degrees, New Flexibility." *College Management*, October 1970, 20-22.
- The Commonwealth of Massachusetts. "Third Report of the Special Commission to Develop a Master Tax Plan Relative to the Massachusetts Economy and Its Growth Potential." Senate No. 1315, February 1971.
- The Commonwealth of Massachusetts Department of Education. *General Laws Relating to Education*. Boston: Author, 1966.
- Corazzini, Arthur J., et al. *Study of Higher Education, Metro II-Boston*. Boston: Commonwealth of Massachusetts Board of Higher Education, date unknown.
- Dean, Mary Smith. *History of the Massachusetts Normal Art School* (1873-74 to 1923-24). Reprinted from 10 issues of the M.N.A.S.A.A. "Bulletin" with slight changes and additions (April 1923 to May 1924).
- Dennis, Lawrence E. "The Other End of Sesame Street," in *New Teaching, New Learning*. Washington, D.C.: American Association for Higher Education, 1971.

226 NEW DIMENSIONS OF CONTINUING STUDIES

Deyo, Donald E. *Access to Quality Community College Opportunity* (a master plan for Massachusetts Community Colleges through 1975). Boston: Commonwealth of Massachusetts, Board of Regional Community Colleges, May 5, 1967.

Dressel, Paul L. (Ed.) *The New Colleges: Toward an Appraisal*. Iowa City, Iowa: The American College Testing Program, 1971.

Efron, Edith. "Boston: Home of the Bean, the Cod and WGBH." *TV Guide*, December 18, 1971, 19, 33-40.

ERIC Clearinghouse for Junior Colleges. *A Directory of Self-Instructional Materials Used in the Junior College*. Los Angeles: Author, Summer 1971.

Eurich, Neil, and Schwenkmeyer, Barry. *Great Britain's Open University: First Chance, Second Chance, Last Chance?* New York: Academy for Educational Development, August 1971.

Framingham State College. *Framingham State College Division of Graduate & Continuing Studies* (Spring Bulletin). Framingham, Mass.: Author, 1971.

Furniss, W. Todd. "Degrees for Nontraditional Students." *A.C.E. Special Report*. Washington, D.C.: American Council on Education, April 9, 1971.

Glynn, Marie E. *Program of Continuing Studies, Financial Reports and Enrollment Data, July 1, 1970-June 30, 1971*. Boston: Board of Trustees of State Colleges, Massachusetts State College System, September 1971.

Harclerod, Fred F., Sagen, H. Bradley, and Molen, C. Theodore, Jr. *The Developing State Colleges and Universities: Historical Background, Current Status, and Future Plans*. The American College Testing Program, October 1969.

Harvard University. *Commission on Extension Courses* (Sixty-Second Year-1971-1972). Cambridge, Mass.: Commission on Extension Courses, Harvard University, 1971.

Harvard University. *The Pace Program, 1971-72*. Cambridge, Mass.: Commission on Extension Courses, Harvard University, 1971.

Head Librarians of the Massachusetts State Colleges. *A Proposal for the Improvement of Massachusetts State College Undergraduate Library and Learning Resource Services*. Boston: Finance Committee of the Board of Trustees, Massachusetts State College System, January 3, 1972.

BIBLIOGRAPHY 227

- Huberman, Michael, and Bertelson, Paul. *Renovation in Higher Education: Dynamics of Interaction between the University and Adult Education*. Paris, France: International Congress of University Adult Education, UNESCO Secretariat, August 1970.
- Hunter, Armand L. "Current Uses of Audio-Visual Media in Correspondence Study," in *Newer Media in Correspondence Study*. Austin, Texas: University of Texas, 1962, 28-29.
- I|D|E|A. "Stinging Indictment of the Faculty Professor" in *Student Power* (an I|D|E|A occasional paper). Dayton, Ohio: The Institute for Development of Educational Activities, Inc., 1968.
- Illinois Board of Higher Education. *A Master Plan—Phase III*. Springfield, Ill.: Author, May 1971.
- Jessup, F. W. *The Changing Role of Universities and Adult Education*. Paris, France: International Congress of University Adult Education, UNESCO Secretariat, August 1970.
- Katz, Bennett. "Educational TV (Maine)" in *Compact*. Denver, Colo.: Education Commission of the States, December 1971, 33.
- Levin, Melvin R., and Slavet, Joseph S. *Continuing Education*. Lexington, Mass.: D. C. Heath Company, 1970.
- Lichtman, Jane. *The Experimental Subcollege*, Report 12. Washington, D.C.: ERIC Clearinghouse on Higher Education, June 1971.
- Liveright, A. A., and DeCrow, Roger. *New Directions in Degree Programs Especially for Adults*. Chicago: Center for the Study of Liberal Education for Adults, July 1963.
- Lowell Institute Cooperative Broadcasting Council. *A Sampling of Television Courses Currently Being Offered for Credit*, WGBH. Boston, Mass.: April 20, 1971.
- Malone, Mary F. *Educational Horizons for Nursing in Massachusetts*. Boston: Massachusetts Higher Education Facilities Commission, Massachusetts State Board of Higher Education, 1968.

228 NEW DIMENSIONS OF CONTINUING STUDIES

Mangun, Vernon Lamar. *The American Normal School, Its Rise and Development in Massachusetts*. Baltimore, Md.: Warwick & York, Inc., 1928.

Martin, W. T. *The Open University of the United Kingdom*. Cambridge, Mass.: Harvard University, August 19, 1971.

Massachusetts Advisory Council on Education. *Teacher Certification and Preparation in Massachusetts: Status, Problems and Proposed Solutions* (Report Number I). Boston: Public Document Division, Secretary of State's Office, June 1968.

Massachusetts College of Art. *Catalog*. Boston: Author, 1970.

Massachusetts College of Art. *Program of Graduate and Continuing Studies 1971-1972*. Boston: Author, 1971.

Massachusetts Department of Commerce and Development. *Population Movements in Massachusetts 1955-1965*. Boston: Author, November 1966.

Massachusetts Department of Commerce and Development. *City & Town* (Town of Wakefield). Boston: Author, June 1970.

Massachusetts Maritime Academy. *1972-1973 Catalog*. Buzzards Bay, Mass.: Commonwealth of Massachusetts, Division of State Colleges, 1972.

McCarthy, Patrick E., et al. *Higher Education in the Boston Metropolitan Area*. Boston: Massachusetts Board of Higher Education, 1969.

McCartney, Abbie Bowlby. *Historical Resume of the Alumnae Association of: First State Normal School in America, State Teachers College at Framingham*. The Alumnae Association of the State College at Framingham, Mass., June 1964.

McDonald, L. E. (Chairman). *Report of the Conference on Newer Media in Correspondence Study*. Austin, Texas: Division of Extension, University of Texas, 1962.

McNeil, Donald R. "Attitudes of Extension Personnel about Their Jobs." *Continuous Learning*, September-October 1963, 198-206.

BIBLIOGRAPHY 229

- Mitchell, Sidney. "Supervised Correspondence Study for High Schools and for Adults Taking High School Courses." *The Home Study Review*. Washington, D.C.: National Home Study Council, Spring 1962.
- Moore, Edward C. *The Future as Opportunity* (an overview of public higher education in Massachusetts). Boston: Board of Higher Education, January 1971.
- Muirhead, Peter P. (acting U.S. Commissioner of Education). *Higher Education and Community Service*. Third Annual Report, National Advisory Council on Extension and Continuing Education, Office of Education, Department of Health, Education, and Welfare, Washington, D.C., March 31, 1969.
- Nash, John F. "An Issue of Finance." Special Conference on Continuing Studies of the Massachusetts State College System, Boston, Mass., February 5, 1972.
- National Education Association. *Rankings of the States, 1970* (Research Report 1970-R1). Washington, D.C.: Author, 1970.
- The New England Board of Higher Education. *Facts 1969-1970*. Wellesley, Mass.: Author, 1969.
- The New England Board of Higher Education. *Facts 1970-1971*. Wellesley, Mass.: Author, 1970.
- The New England Board of Higher Education. *Facts 1971-1972*. Wellesley, Mass.: Author, 1971.
- North Adams State College. *Bulletin of Undergraduate Studies*. North Adams, Mass.: Author, 1971.
- Nyquist, Ewald B. *The Idea of the University of the State of New York*. Albany, N.Y.: State Education Department, September 15, 1970.
- Oklahoma State Regents for Higher Education. *Oklahoma Higher Education Televised Instruction System* (Bulletin, Spring 1971). Oklahoma City, Okla.: Author, Spring 1971.
- Oklahoma State Regents for Higher Education. *Oklahoma Higher Education Televised Instruction System* (Bulletin, Summer 1971). Oklahoma City, Okla.: Author, Summer 1971.

230 NEW DIMENSIONS OF CONTINUING STUDIES

Oklahoma State Regents for Higher Education. *Talkback Television for Oklahoma Business and Industry (Campus-to-Plant Graduate Education)*. Oklahoma City, Okla.: Author, 1971.

Open University. *The Open University (Prospectus 1972)*. The Secretary, The Open University, Walton, Bletchley, Bucks, U.K.

Palladino, Joseph R., et al. *An Interim Report—Continuing Studies*. Framingham, Mass.: Division of Graduate and Continuing Studies, Framingham State College, 1971.

Palladino, Joseph R. "Overview, Background and Programs in Continuing Studies." A paper read at Special Conference on Continuing Studies Programs of the Massachusetts State College System, Boston, Mass., February 5, 1972.

Peirce, Cyrus, and Swift, Mary. *The First State Normal School in America. The Journals of Cyrus Peirce and Mary Swift*. Cambridge, Mass.: Harvard University Press, 1926.

Pemberton, Frank. "Education after Dark." *Harvard Today*. Cambridge, Mass.: Harvard University, 1963.

Phelps, Reginald H. "Two Bushels of Wheat." *The Harvard Alumni Bulletin*. Cambridge, Mass.: Harvard University, September 26, 1959.

Phelps, Reginald H. "Broadening the Base of Education." *Harvard Graduate School of Education Association Bulletin*, Fall 1962, 7.

Phelps, Reginald H. *University Extension (Annual Report)*. Cambridge, Mass.: Harvard University, 1967-68.

Phelps, Reginald H. *University Extension (Annual Report)*. Cambridge, Mass.: Harvard University, 1968-1969.

Phelps, Reginald H. *University Extension (Annual Report)*. Cambridge, Mass.: Harvard University, 1969-1970.

Pifer, Alan. "Is It Time for an External Degree?" *College Board Review*, No. 78. New York: College Entrance Examination Board, Winter 1970-71.

BIBLIOGRAPHY 231

Ramsdell, Louie G., Gerritson, Maude B., Coss, Millicent M., and Lombard, Lou. *First State Normal School in America: The State Teachers College at Framingham, Massachusetts, 1839-1939*. The Alumnae Association of the State Teachers College at Framingham, Massachusetts, June 1959.

Renck, Richard, Kahn, Earl L., and Gardner, Burleigh B. *Continuing Education for R & D Careers*. Washington, D.C.: National Science Foundation, June 1969.

Schaefer, Carl J., and Kaufman, Jacob J. "Occupational Education for Massachusetts." A report prepared for the Massachusetts Advisory Council on Education, June 1968.

Schaefer, Carl J., and Kaufman, Jacob J. *New Directions for Vocational Education*. Lexington, Mass.: D. C. Heath and Company, 1971.

Schworm, Zelpha G. (Coordinator). *Beyond the Campus: Views on Higher Education and Community Service*. Boston: Board of Higher Education, 1971.

Sharon, Amiel T. *College Credit for Off-Campus Study*, Report 8. Washington, D.C.: ERIC Clearinghouse on Higher Education, March 1971.

Southern Association of Colleges and Schools. *Proposed Revision of Standard Nine Special Activities* (Standards of the College Delegate Assembly). Atlanta, Ga.: the Southern Association of Colleges and Schools, July 2, 1971.

State of Illinois Board of Higher Education. *Extension and Public Service*. Report of Master Plan Committee G. Springfield, Ill.: Author, 1963.

State of Illinois Board of Higher Education. *Report of the Library Committee*. Springfield, Ill.: Author, June 1969.

Stearns, Eben S., Walton, Electa N. L., and Shepard, Grace F. *Historical Sketches of the Framingham State Normal School*. Framingham, Mass.: Alumnae Association, Framingham State College, July 1914.

Townsend-Cohs, E. K. *Universities and Adult Education Research and Training: A Survey*. Paris, France: International Congress of University Adult Education, UNESCO Secretariat, August 1970.

232 NEW DIMENSIONS OF CONTINUING STUDIES

Troutt, Roy. *Special Degree Programs for Adults: Exploring Nontraditional Degree Programs in Higher Education*. Iowa City, Iowa: The American College Testing Program, 1971.

The University of the State of New York. *The New York College Proficiency Examination Program*. Albany, N.Y.: Author, 1971.

U.S. Department of Health, Education, and Welfare. "Definition of Continuing Education." *Higher Education General Information Survey*, U.S. Department of Health, Education, and Welfare, O.E. Form 2300-8, 1971.

Valley, John R. *An Inventory of External Degree Programs and Proposals*. Princeton, N.J.: Educational Testing Service, March 3, 1971.

Walters, Don. *Final Report of the Board of Higher Education*. Master Plan Committee on Continuing Education and Public Service. Boston: Massachusetts Board of Higher Education, July 1, 1971.

Warren, Jonathan R. *College Grading Practices: An Overview*, Report 9. Washington, D.C.: ERIC Clearinghouse on Higher Education, March 1971.

Willis, Benjamin C. *Quality Education for Massachusetts: An Investment in the People of the Commonwealth*. Boston: Commonwealth of Massachusetts, December 1964.

Wilson, Logan. "Alternatives to College for Everybody." An address delivered at the 53rd Annual Meeting, American Council on Education, October 9, 1970.

Zacharias, Jerrold R. *The Open University*. Boston: Massachusetts Board of Higher Education, September 15, 1971.

Zigerell, James J. "Televised Instruction: Where Do We Go from Here?" *Educational Technology*, September 1969, 72-76.

Zigerell, James J. "What's New in Chicago's TV College?" *Educational Television*, September 1969, 16-18.